EXCITING TALES OF SCIENCE FICTION

fantastic ANC ADVENTURES

NOVEMBER 25¢

By S. M. TENNESHAW

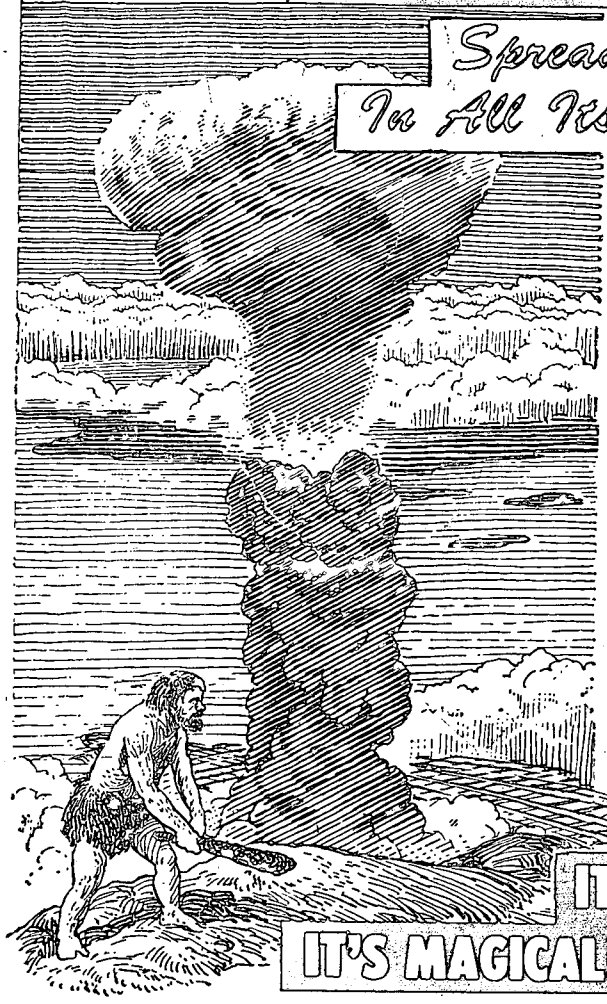
QUEEN OF THE ICE MEN

IAD RULED THE ARCTIC CIRCLE FOR A THOUSAND YEARS!

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

THE AWESOME WORLD OF FUTURE SCIENCE

Spread Out Before Your Eyes In All Its Amazing Possibilities!



Ever since Man knew a tomorrow would come he has wondered what it would bring. Always he has sought to pierce the veil and learn what awaits him in the marvelous future. Now you need no longer wonder—for here is a magazine which for twenty-two years has pictured the world-to-come with an incredible accuracy. You cannot mention any scientific wonder of today which was not foretold in exciting detail in this magazine long before it came to pass—even to the atom bomb! A study of its back issues would leave you staggered, unbelieving, shocked . . . but realizing the truth: no prophet in history has ever come anywhere near the terrific achievements of actual prophecy attained by this sensational magazine!

IT'S TERRIFIC!

IT'S EXCITING!

IT'S MAGICAL!

When are we going to the Moon, to Mars, to other interplanetary worlds? Are they inhabited? What is the future of the atom, now that we've discovered how to unlock its power? What great wars do we face? What terrific social upheavals? What amazing inventions? The answers to these questions, and many more, are told monthly in the guise of exciting, thrilling, vastly entertaining fiction that moves like the wind through the corridors of imagination, the most potent force in all the world!

AMAZING STORIES

BEST KNOWN SCIENCE FICTION MAGAZINE IN THE WORLD

AT YOUR NEWSSTAND EVERY MONTH

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

MORE MONEY, $ $ $ a BETTER JOB

YOU'RE in the biggest competition — yes, the biggest battle in the world — that of making a living. You have to work for a living—so does everyone else. Competition for promotion is keen—people all around you are looking for more money—a better job—*and so are you.*

You can get a head start. Other men have—and in a short time you should be able to out-distance those who have no progress plan, make more money—have a better job—a more certain future.

Few people prepare themselves for that promotion—that better job and more money. Not many are making any special effort to learn outside of the time they put in each day on their work. They're taking the long, hard road to success. *How about you?* Are you, too, taking that same old, winding road—with its many disappointments and heartbreaks?

Here at LaSalle we have been training ambitious men and women for success for more than 40 years—enrolled hundreds of thousands of students—and our files overflow with grateful letters from students who have attained success and earnings far beyond their fondest dreams.

Perhaps we can help you—at any rate it will be well worth a three cent stamp to mail the coupon below. DO IT NOW! Just check the field of your choice and we'll send you full information on that field without obligation—plus "Ten Years' Promotion in One"—a book which has helped many men. It may be the turning point in your life to a successful career, and more money.

LASALLE EXTENSION UNIVERSITY
A Correspondence Institution
Dept. R-190 Chicago 5, Ill.

Your Competition is Keen

CLIP AND MAIL THIS COUPON TODAY!

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

fantastic ADVENTURES

NOVEMBER, 1949

All Features Complete

Trade Mark Registered U. S. Patent Office No. 373844

WILLIAM B. ZIFF
Chairman of the Board and Publisher

B. G. DAVIS
President

Vice-Presidents:
MICHAEL H. FROELICH
Dir. Eastern Division

H. J. MORGANROTH
Production Director

H. G. STRONG
Circulation Director

Secretary-Treasurer
A. T. PULLEN

Art Director
HERMAN R. BOLLIN

Editor
RAYMOND A. PALMER

Managing Editor
WILLIAM L. HAMLING

Associate Editor
LILA SHAFFER

Art Editor
BRAD PENDLETON

THE EDITOR'S NOTEBOOK
By The Editor 6
MAN VERSUS METAL
By Carter T. Wainwright 32
TRIAL BY FIRE
By William Karney 32
VICIOUS VIKING
By H. R. Stanton 33
REFLECTIONS . . .
By W. R. Chase 50
HOMEOPATHIC MAGIC
By Sandy Miller 51
STF EXPANDS
By J. R. Marks 51
BUILDING BLOCKS
By L. A. Burt 51
BUILD A BOMB!
By June Lurie 76
"BRAIN" MACHINES
By Walter Lathrop 77
NATURAL ROCKETS!
By Milton Matthew 103
PROGRESS REPORT
By Jon Barry 103
SWAMP AIRPORTS
By Cal Webb 103
SCAN AND SCRAM
By Ramsey Sinclair 116
JET-PROPELLED AUTOS
By Lynn Standish 116
THIS'LL HAUNT YOU!
By A. T. Kedzie 117
READER'S PAGE
By The Readers 150
SPACE SHIPS AT WAR
By A. Morris 152
FANTASTIC FACTS
By Lee Owens 153

Published monthly by ZIFF-DAVIS PUBLISHING COMPANY at 185 North Wabash Ave., Chicago 1, Ill. New York Office, Empire State Building, New York 3 N. Y. Entered as second class matter June 3, 1947 at the Post Office, Chicago, Illinois under the Act of March 3, 1879. Additional second class entry, Holyoke, Massachusetts. Subscriptions: in U. S., Canada, Mexico, South and Central America and U. S. Possessions $2.50 for 12 issues; all other foreign countries $3.50 for 12 issues. Subscribers should allow at least two weeks for change of address. All communications about subscriptions should be addressed to the Director of Circulation Ziff-Davis Publishing Company 185 North Wabash Ave., Chicago 1, Ill.

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

VOLUME 11 NUMBER 11

All Stories Complete

QUEEN OF THE ICE MEN (Novelette—13,000) ..... by S. M. Tenneshaw 8
Illustrated by Julian S. Krupa
Who were these strange men of the ice world led by a Titan queen? Scott wanted to know..

THE INSANE ROBOT (Short—9,500) ..... by Craig Browning 34
Illustrated by Leo R. Summers
The sanitarium had some queer patients, Lefty knew. And the strangest of all was — a robot!

LUNAR HOLIDAY (Short—7,000) ..... by Peter Worth 52
Illustrated by Julian S. Krupa
Earthmen took their vacations on the Moon—and space pirates needed a rest sometimes too!

THE BIOLOGICAL BARRIER (Short—6,800) ..... by Anthony B. Ott 64
Illustrated by Henry Thiede
The estate was well guarded, and for a reason—giant insects ran loose within its bounds . . .

MY NAME IS MADNESS (Novelette—15,000) ..... by Henry Gade 78
Illustrated by Julian S. Krupa
Was the machine really an alien intelligence? If not, how could it drive men mad? . . .

SLEEPWALKER OF SANDWICH (Short—7,000) ..... by Lee Prescott 104
Illustrated by Bill Terry
This sleepwalker had a peculiar habit—his nocturnal prowls led into another world! . . .

THE WHITE GOD OF CHICHEN ITZA (Novelette—16,500) .... by Gilbert Mead 118
Illustrated by Bill Terry
He waited for a bus to take him home, but the trip was a long one—1000 years in time! . . .

Front cover painting by Robert Gibson Jones, illustrating a scene from "Queen of the Ice Men."

Copyright, 1949, ZIFF-DAVIS PUBLISHING COMPANY
Member of the Audit Bureau of Circulations
We do not accept responsibility for the return of unsolicited manuscripts or artwork. To facilitate handling, the author should enclose a self-addressed envelope with the requisite postage attached and artists should enclose or forward return postage. Accepted material is subject to whatever revision is necessary to meet requirements. Payment covers all authors', contributors' and contestants' magazine rights in the U. S. A. and all other countries in the article and—or illustrations and for publicity and promotion in connection therewith and will be made at our current rates upon acceptance. All photos and drawings will be considered as part of material purchased. The names of all characters that are used in short stories, serials and semi-fiction articles that deal with types are fictitious. Use of a name that is the same as that of any living person is coincidental.

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

The Editor's Notebook

A CONFIDENTIAL CHAT WITH THE EDITOR

S. M. TENNESHAW returns to the pages of your favorite magazine this month with the feature story, "Queen of the Ice Men". We gave Tenneshaw a sneak preview of the new Bob Jones cover, and he asked hopefully if he could write a story around the cover. We gave him the go ahead sign and the result you'll find starting on page 8. The story is something we won't tell you too much about, as we wouldn't want to spoil anything, but we will say that you're in for some solid stf adventure in the deep Artic wastelands. You'll meet a strange race of Ice Men and their even stranger leader—a Titan, queen! And—but that's all. So go ahead and enjoy yourself!

CRAIG BROWNING comes through with a new short story concerning the devil-may-care Lefty Baker. Many of you are already acquainted with the antics of Lefty Baker from the series that has been running in our big sister publication, AMAZING STORIES. So we're giving you FA fans a treat this month by presenting the newest yarn in this popular series. "The Insane Robot" is the title, and you're in for some whacky entertainment as you follow Lefty through the grounds of a sanitarium, where he meets— But you'll find out when you start reading on page 34.

"LUNAR HOLIDAY" is Peter Worth's latest offering for your reading pleasure. This time Pete comes up with an interplanetary yarn with a somewhat different theme. The yarn centers around the Moon which, according to Pete, will be used as a vacation spot in the coming centuries. But, Pete theorizes, a vacation spot for whom? Earthmen, naturally, but what about men who have violated the law and become hunted criminals throughout the system? Would a space pirate dare to take a rest on the Moon? You'll find the answers to these questions when you read the story. So go ahead.

MANY OF you will remember our next author as having written some fine adventure stories in our former sister publication, *Mammoth Adventure*. Anthony B. Ott bows into the pages of FA this month with a short story, entitled, "The Biological Barrier". It's all about a huge estate in the southern part of the country where secret experiments were being carried out—experiments that produced a horde of giant insects. What happened then? You'll have to turn to page 64 and find out for yourself. We think that Anthony Ott did a workman-like job on the yarn. See what you think.

ALL OF YOU who have been FA fans for years will remember the many fine stories of Henry Gade. Well, we're glad to present a new story by this talented writer, entitled, "My Name Is Madness". Hank is a writer who has always come up with top-notch ideas for his yarns. This new one is no exception. It concerns a machine that seemed to be actually, an alien intelligence. At any rate, people who came in contact with it suddenly became mad. Was it really an alien intelligence, strong enough to enter a man's mind and drive him insane? You'll have plenty of thrills while you read the story and find the answer...

ONE OF OUR two new authors for this issue is Lee Prescott, who has written a charming little tale called, "Sleepwalker of Sandwich". This is the story of a man who was plagued with the nocturnal habit of sleepwalking. That much was bad enough. But in this particular case, the sleepwalker not only roamed around his own house—but out of it and into another world! You'll find some fine entertainment as you follow him into his strange nocturnal existence. So sit back and enjoy yourself.

FINISHING UP the issue is another new writer to the pages of FA. This time, Gilbert Mead, who presents "The White God of Chichen Itza". This story starts with a man waiting for a bus. He doesn't catch the bus, but he does take a trip—through centuries of time and into— But that's all we'll tell you here. We feel that for a first effort, Mr. Mead has done a swell job. Let us know what you think.

LAST MONTH we announced a great new novel by Rog Phillips coming up soon. Well, this month we're pleased to announce further that "The Involuntary Immortals" will be our feature story for next month. The novel is a full 55,000 words, and we think it's one of the finest stories Rog has turned out yet. You won't want to miss it, so keep an eye on your newsstand for the December issue. Among other fine stories in the issue will be a swell new yarn by popular Craig Browning, entitled, "The Runaround".
See you then.....WLH

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

"THIS WISDOM MUST DIE!"

Truths That Have Been Denied Struggling Humanity

FOR every word that has left the lips of bishops or statesmen to enlighten man, a thousand have been withheld. For every book publicly exposed to the inquiring mind, one hundred more have been suppressed—*damned to oblivion*. Each year of progress has been wilfully delayed centuries. Wisdom has had to filter through biased, secret sessions or ecclesiastical council meetings, where high dignitaries of state and church alone proclaimed what man should know.

Are you prepared to demand the hidden facts of life? Will you continue to believe that you are not capable of weighing the worth of knowledge that concerns your personal freedom and happiness? Realize that much that can make your life more *understandable* and *livable* has been left unexplained or intentionally destroyed. At first by word of mouth only, and *now* by private discourses, are *revealed* those truths which secret brotherhoods preserved in ancient temples and hidden sanctuaries, from those who sought to selfishly deprive humanity of them.

THIS *free* BOOK OF EXPLANATION

Let the Rosicrucians, one of these ancient brotherhoods of learning, tell you about these amazing truths, and explain how you, too, like thousands of others, may now use them to enjoy the fullness of life. The Rosicrucians, (not a religious organization) invite you to use the coupon opposite and receive the FREE copy of the fascinating, Sealed Book, with its startling tale of *self help*.

The ROSICRUCIANS (AMORC)
SAN JOSE, CALIFORNIA, U. S. A.

Scribe L. X. R.
THE ROSICRUCIANS (AMORC)
Rosicrucian Park, San Jose, California, U.S.A.

Please send me your FREE Sealed Book. I am sincerely interested in learning how I may receive these long-concealed facts of life.

Name.....

Address.....

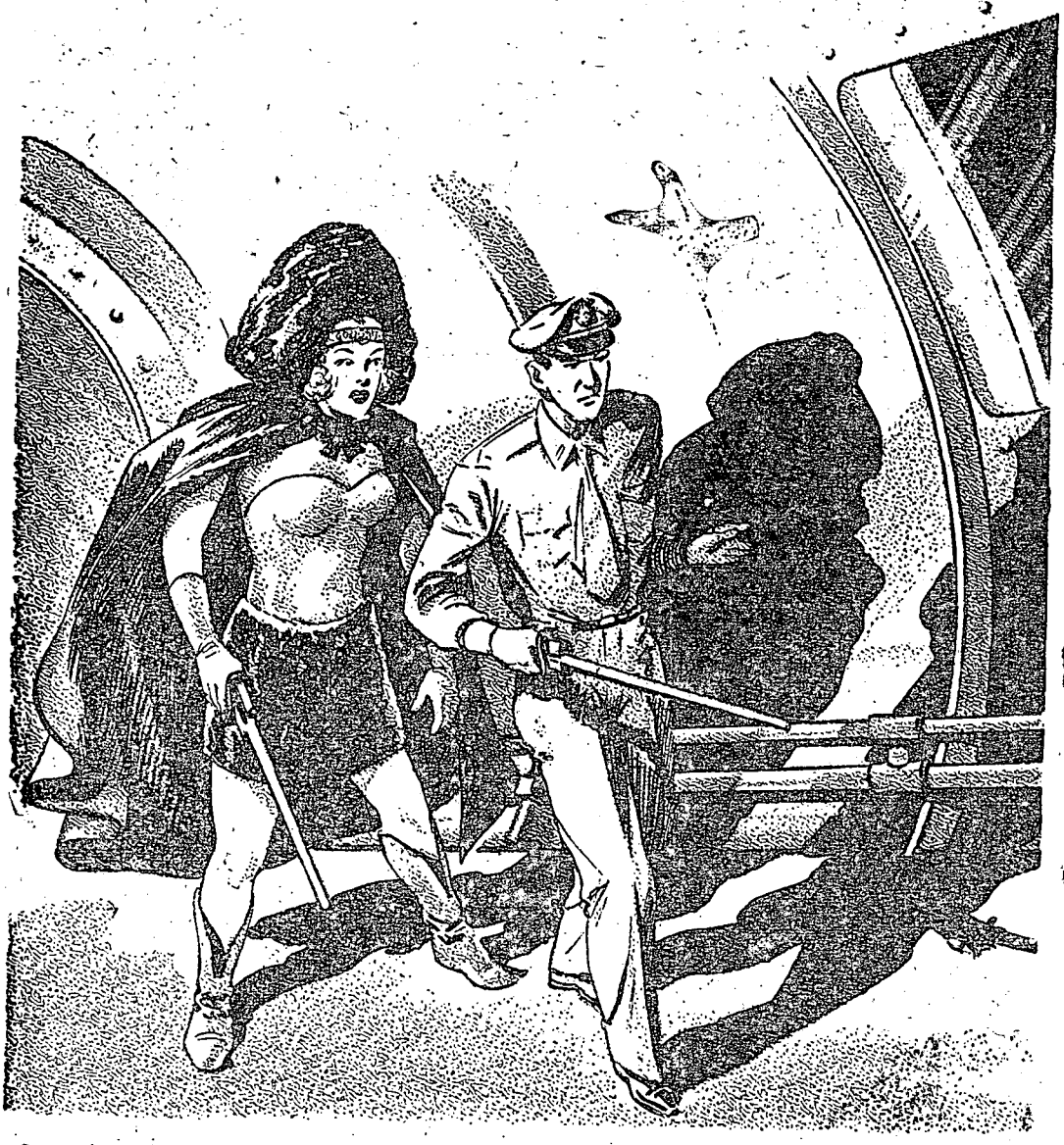
PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

QUEEN of the ICE MEN

By S. M. TENNESHAW

A Sudden cross wind jolted the plane. Scott fought the controls, but the twin-engined Lockheed responded sluggishly. Ice had formed on the fuselage and wings, making the plane less maneuverable, and the fierce winds of this northernmost corner of Alaska created a further difficulty.

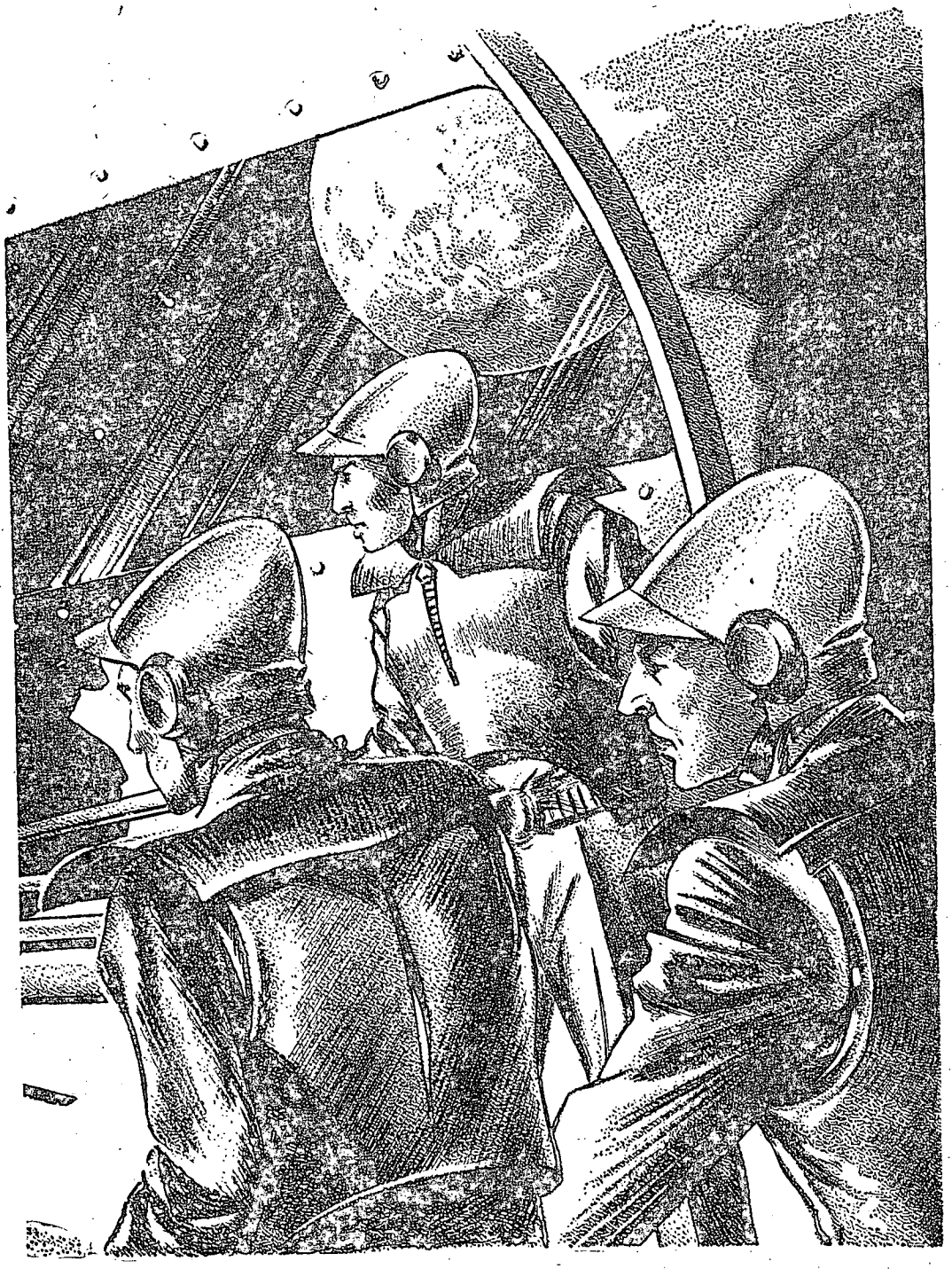
Scott swore under his breath as he struggled to keep the Lockheed steady. He had been flying low in



Scott placed himself in front of Zetys, and held the sword-like weapon in a tense hand . . .

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

What was the secret of this strange race hidden deep within the Arctic Circle? And was their titan Queen really immortal?



PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

order that he and Colby would miss nothing in their search. They had penetrated a region of local gales, deep within the Arctic Circle, and the resulting stresses and strains upon the Lockheed had been responsible for the failure of the deicing unit to function properly.

In the adjoining seat, Colby lowered his binoculars and spoke with a sharp note of irritation. "For Pete's sake, can't you keep us from bouncing around?"

"In this wind?" Scott returned. "And with ice on the wings?"

"If you knew your business—" Colby began.

"I do," Scott said. "That's why I say it's time we were heading back to base."

"Getting cold feet?"

"Cold feet, hell! If I've got anything, it's common sense. This is no country for taking risks. The ice on the plane is getting heavier, and I won't be able to keep us in the air very long."

Colby's sharp, coldly efficient face hardened. "You just worry about flying this ship, Scott. I'll do the thinking. Don't forget that I outrank you, and that I'm in command of this operation."

"I won't forget," Scott said grimly. "Neither will I forget that you cost me a couple of promotions. I couldn't have helped that accident, and you know it. But you've always had it in for me. In your testimony before the board, you deliberately distorted the facts of what really happened."

"You were cleared, weren't you?"

"Sure—but you fixed it so my record would have a question mark on it. A question mark that's keeping me from being promoted."

Colby's dark eyes were narrowed. "That's not a nice thing to say about a man who outranks you, Scott. You try to push that story, and I'll have you kicked out of the Air Force. I'm a major now, you know, and you're still just a lieutenant. I can do it."

Scott said nothing more, but his lips were narrow with defiance. He peered through the windshield, watching the mountainous, snow-covered terrain unroll below. This was one of the few remaining frontiers, an untamed vastness of desolate tundras and bleak ridges, of still valleys and deep gorges, only a few of which had as yet known the tread of human feet. The region had been penetrated in large part only by a handful of explorers and occasional bands of roving Eskimos, though now it was becoming a scene of activities on the part of the defense forces of the United States. Military and air bases were pushing through the Arctic wilderness, and already, in the most remote districts, were meteorological and survey stations.

It was at one of these latter posts, Scott recalled, where an incident had occurred that had culminated in Colby and himself being launched on their present expedition.

AN ESKIMO had stumbled into the station, half dead from starvation and exposure. When he had recovered sufficiently, he had given an account of his experiences that had seemed wildly fantastic. He had received a fair smattering of mission English, and thus there was no possibility that he had been gravely misunderstood.

The Eskimo told of having been captured and enslaved, along with several companions, by a mysterious band of white people whom he called the Ice men. The Ice Men lived in an enormous igloo, which was located in a deep valley, en-

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

circled by mountains. They possessed seemingly numberless magical weapons and devices, and among other things, according to the Eskimo, they had the ability to alter their size, becoming giants when necessity required.

Even more incredible had been his statement that the Ice Men were ruled by a beautiful woman, who had lived for a thousand years.

The men at the station, who had been instructed never to overlook anything the slightest bit unusual, had radioed the Eskimo's story to the nearest air base. The colonel in charge of the base had been given similar instructions. Further, he saw in the report of the Ice Men, however colored and embroidered it might have been, a possibility of military threat. He had acted at once, dispatching Lieutenant Jeff Scott and Major Vance Colby on an aerial investigation.

The two men were to do no more than to ascertain whether the valley, with its reputedly vast igloo habitation, actually existed. Any further action would depend on the results of their search.

The Eskimo had been questioned closely regarding landmarks in the vicinity of the valley, as well as the route taken and the time spent on his flight. Scott and Colby had been furnished with this data in the hope that, if the valley had any basis in fact, it would lead them to their goal without a long and painstaking search.

Scott, however, was becoming grimly certain that he and Colby had been sent on a wild goose chase. They had been in the air for a dangerously long period, and so far none of the landmarks described by the Eskimo had been sighted.

The increasing thickness of the Lockheed's ice coating worried Scott. He had faced the situation a number of times before, but in the present instance the savagely conflicting winds of this region created a serious additional hazard. He knew Colby was insisting that they continue the search only to oppose him.

They had gone counter to each other almost from the first moment they had met, perhaps simply because their dissimilar natures had kindled a mutual suspicion. Scott was easy-going, a man of warm impulses, whereas Colby tended to be coldly critical and precise. Their distrust of each other had flared into open hostilities, in which, as the result of a plane accident, Colby had gained the upper hand.

Scott had been flying a long-range bomber at the time, with Colby and another man aboard as a limited crew. An engine failure had confronted Scott with a forced landing in rough country, and the bomber had been heavily damaged. Colby had suffered bruises and lacerations, while the other man had died of a brain concussion.

Later, in testifying before an inquiry board, Colby accused Scott of gross negligence. Colby, however, had not been present in the pilot room when the accident occurred, and thus could not give specific evidence to support his claim. Instead he had told of being a witness to Scott's carelessness on numerous past flights, contending it was a repetition of this that had led to the accident.

Scott had heatedly denied the accusation. He was one of those rare individuals who have an instinctive feel for complicated machinery, who are able to operate them with a nonchalance which appears to be carelessness on the surface, but which is actually the result of a complete and deeply ingrained skill. Colby had not understood this. He had always

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

insisted on strict obedience to classroom rules and methods.

In the end Scott had been cleared—but a stigma had crept in between the lines of his record, which had kept him from being promoted.

RECALLING this now, Scott thought it ironical that he and Colby should have been assigned to the search together. Ironical—and dangerous. He knew it was a temptation to rid himself of the man, to even accounts for the injustice he had suffered.

Colby had raised his binoculars again, and was peering intently at the jagged terrain below. Now he stiffened, as though startled, then swung around to Scott. He pointed in suppressed excitement.

"Scott! Look—down there! Do you see it?"

"Sure," Scott grunted. "My eyes are as good as a pair of binoculars any day."

Muttering with annoyance, Colby passed the glasses to Scott and took over the controls. Scott followed the direction of the other's pointing finger, and in another moment an object leaped into focus. It was a snow-covered hemisphere that bore a striking resemblance to an Eskimo igloo, but it looked larger than any igloo Scott had ever seen.

The hemisphere was situated in the approximate center of a deep valley. Surveying the girdling peaks with greater attention, Scott recognized among them several which had been described as landmarks by the fugitive Eskimo. He felt a sudden, leaping wonder, as though this were final proof that his and Colby's eyes had not somehow been tricked.

"You saw it?" Colby asked eagerly.

Scott nodded without speaking. He returned the binoculars and took over the controls again.

"We've found what we were looking for, all right," Colby went on. "That Eskimo wasn't out of his mind as I suspected.... Keep going toward the valley, Scott. I want to give that igloo thing a closer inspection before we head back."

The Lockheed had grown even more difficult to handle, but Scott set his lips and concentrated on the task of keeping it steady. The distant circle of peaks grew in size and detail, as did the weird hemisphere lying within their embrace. Awe touched him as the full dimensions of the igloo shape became more obvious. It was huge, enclosing within itself more space than many large buildings back in civilization.

The valley rim passed below the plane, and the hemisphere ahead rapidly drew nearer. Colby wanted to circle it once or twice while giving it a careful examination through the binoculars. Scott did not care for the idea, but he made no objections. He remembered that the inhabitants of the weird igloo structure had been reported to possess weapons. He did not know if this were true, nor was he certain if the igloo were inhabited at all. The fact that it actually existed, however, suggested that anything might be possible. Colby's unemotional and hard-headed nature tended to discount anything that had not withstood the acid-test of first-hand, personal experience.

Presently the hemisphere was a little more than a thousand feet below and to one side. Scott was preparing to swing the Lockheed around in a circle, when he felt a sudden, sharp tingling sensation, as though an electric current had momentarily coursed through his body. He was startled, almost losing control of the plane.

Dimly he heard Colby gasp in sur-

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

prise, but he was hardly aware of that as another and more serious incident claimed his attention.

The Lockheed's motors abruptly died.

SCOTT REACTED instantly in an effort to glide the plane down to a landing. A suspicion tugged at the back of his mind. The tingling sensation he had felt somehow seemed connected with the abrupt failure of the engines. He wondered if the unseen inhabitants of the igloo structure had used some sort of a weapon on the plane, a weapon that had caused the motors to cease functioning.

Colby's sharp features were perplexed. "What happened?" he demanded.

"The motors quit," Scott returned shortly. "Or haven't you noticed?"

"Of course!" Colby snapped. "What I want to know is why?"

"I don't know—and right now I don't have time to figure it out." Scott was anxiously searching the snow-blanketed surface toward which the plane was moving, seeking a level stretch upon which to land. The coating of ice on the wings was making the Lockheed difficult to handle, and Scott fought grimly to keep it from going into a dive. Gusts of wind rocked the plane, and clouds of snow fumed and swirled against the windshield.

The Lockheed was close to one side of the valley wall, sweeping down at an angle. It had not been very high to begin with, and the ground was coming up much too rapidly. It was no time to be particular. Scott found what seemed to be an even expanse of snow at an angle to the valley wall, and he drew upon every last bit of his flying skill to jockey the plane down upon it.

The skis touched the snow surface and hit in, and for a moment it seemed that the landing was going to be accomplished safely. Then the left ski struck a rock outcropping and was torn off. The wing on that side dipped, plowing into the snow and raising a white cloud before it crumpled and sheared away. The Lockheed slewed around in a half-circle, and its nose dug into the white drifts; and then the tail assembly reared high into the air, hung poised for an instant, and finally the plane settled heavily on its side, shattering the remaining wing.

Scott's impressions of the landing were kaleidoscopic, confused. There had been swift motion, a sudden, violent shift of direction, and next a series of rough jolts in which earth and sky had merged and changed behind twisting veils of upflung snow. Then, almost as suddenly as everything else had occurred, there was quiet, a breathless, pulsing quiet.

Scott felt shaken and battered, and his head rang from a blow it had somehow received. Doggedly he pulled himself together, straightening from his twisted position in the seat and unfastening his safety straps. He turned his attention to Colby. The other was huddled motionlessly, half on one side. Blood was trickling down from a wound on his forehead. Scott groped for Colby's pulse, and detected a steady beat. The man was still alive and did not seem to have been seriously injured.

Ignoring the protesting aches of his body, Scott freed Colby and laboriously dragged him from the plane, easing him down onto the snow outside. For a moment he stood looking at the unconscious man, thoughts of the past rising bitterly into his mind. He could leave Colby here...leave him to freeze to death. It would be no more than just pay-

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

ment for the wrong he had suffered at the other's hands. He could easily cook up a satisfactory story to explain how it had happened. The plane wreck...temporary amnesia....

SCOTT GRIMACED in abrupt self-disgust and went back into the plane. He found a shoulder pack and a couple of other items of emergency equipment and carried them outside.

He made an effort to revive Colby, but the other did not stir. Straightening, he glanced toward the towering dome of the igloo structure in the near distance. His compact, square-jawed features creased in a frown. If the igloo were inhabited, the presence of the plane would have been noticed, and that meant an investigating committee would shortly be on the way over. To judge from what he had heard of the mysterious Ice Men, they were not hospitable. It would be wise not to lose any time in getting away from the plane.

Scott hurried into the wreck for the last time, trying the radio. There was no response. The radio had been damaged as he had feared.

Outside once more, he searched quickly through the pack, found a .45 automatic, and slipped this into a pocket of his leather flight coat. Then he turned his attention to one of the articles he had taken from the plane, a small tent of heavy canvas. He folded and arranged this so as to form a crude hammock, into which he rolled Colby. Hurriedly he fashioned a harness from a coil of rope, tying the ends to the hammock. Then he slipped the pack over his shoulders, placing the other items about Colby's unmoving form in the hammock and adjusting the rope harness about himself. He braced his body against the harness and began to pull, and the hammock slid after him along the snow, revealing itself as a makeshift sled.

Scott headed toward the tumbled, snow-webbed slopes of the valley wall. He had no great hope of concealing Colby and himself from pursuers. What he sought was a more secure position from which to put up resistance.

Scott slogged through the knee-deep snow, his breath making short, quick plumes in the cold air. Wind lashed his body, staggering him, and snow particles stung his face. Frequently he darted a glance in his rear, but as yet he saw nothing to indicate that he was being followed.

The boulder-strewn base of the slopes drew near. The ground rose and fell steeply here, and Scott found the going increasingly difficult. At one point, while negotiating a rise, Colby spilled from the hammock. Wearily Scott paused to return the man to his former position. A change in the adjustment of the hammock and harness seemed necessary, and Scott was busying himself with this, when a rustling sound reached his ears. At the same time, from the corners of his eyes, he caught a flicker of motion. In a kneeling position, he twisted around. His eyes fastened upon a sight that filled him with shocked disbelief.

A few yards away, against the base of the valley wall, stood a woman, her striking, majestic beauty almost as astonishing as the face of her presence. She was an exotic figure, her face framed in a tall fur headpiece, a long cloak billowing about her shoulders. She wore a fur skirt, and above this a tight-fitting bodice. A jeweled circlet showed at her forehead, and Scott noted that an object resembling a sheathed sword hung at her hip. Her hand was close to this as she gravely watched him, silent and unmoving.

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

The thing Scott found most startling about the woman was the fact that she seemed at least thirty feet tall.

Scott wrenched his mind free from its paralysis of surprise and slowly began moving his hand toward the pocket in which he had placed the automatic. He did not know what the intentions of the giant woman might be, but her advantage of sheer size warned him not to take any chances.

SHE WAS immediately aware of his movement. Her splendid eyes narrowed slightly, and then her hand flashed to the hilt that projected above the sheath at her side. Something blade-like and bright glittered as it leaped from the sheath and swung toward Scott.

He twisted back in dismay, still groping for the automatic, which was eluding his gloved fingers. He felt the bright length brush his shoulder, and in the next instant he had a sensation as though a sheet of flame had risen between the world and himself.

He was completely unable to move.

The flame died almost as swiftly as it had materialized, and its dying left an odd fog before Scott's eyes. With an anguished sense of urgency, he sought to draw the automatic—sought and failed. He could do nothing against the numbness that had gripped his body.

Then, dimly, he became aware that the giant woman was striding past him. He saw her only as a vague, looming shape before she faded out of range. Statue-like, frozen, he could only remain where he was.

He did not know how much time passed until figures appeared around him. He could not see them clearly through the fog, but he was able to make out that they were of normal height, and that they were dressed as exotically as the woman had been.

His surroundings shifted suddenly, and he realized that he had been lifted and was being carried. He thought he saw the giant woman again, but was not certain. His glimpse of her had been brief, and queerly, she seemed to be of ordinary stature.

The vast igloo towered white and close through the fog. Somehow it seemed enormously larger than he had thought it to be. He was carried up an incline of snow and through a very high oval opening in the structure's side. Through broad, well-lighted corridors, then, past groups of staring figures. Faint and far-off, came the sounds of voices, excited, questioning, speaking a soft, slurred language that he did not understand.

And then the stream of motion past him ceased. He realized that he was in a room of some sort, that he had been deposited on a long, padded article of furniture resembling a couch.

The fog began to clear, the numbness to creep from Scott's muscles. Awkwardly he propped himself up on an elbow and glanced about him.

He saw Colby, nearby, stretched upon a couch similar to the one on which he lay. Colby appeared to be still unconscious, and Scott wondered suddenly if the other's injury had been more serious than he had guessed.

He looked beyond Colby and at the room. It had the severe, utilitarian appearance of a prison cell, small and sparsely furnished, the walls of some lusterless, gray metal. There was just enough warmth for comfort, and from somewhere came a faint, steady hum that suggested air conditioning apparatus.

Scott detected a disturbing quality about the room, an aura or odor that hinted of great age. He was puzzling over this, when he heard a stir of

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

motion behind him. Twisting around, he discovered now that there was a doorway in the wall at his back, and within this, watching him intently, were two exotically dressed men. Like the giant woman Scott had seen—who strangely seemed to have lost size at his last sight of her—the two wore tall fur head coverings and fur skirts, or kilts. Each held a long, bright object that was not quite a sword.

One of the men turned abruptly and left. The other remained in the doorway, obviously on guard.

MOVING slowly, Scott swung his legs to the floor. He ran his hands over his body as though searching for hurts, using this as a pretense to see if he still had the automatic.

The weapon was gone. His leather coat had been opened, and he realized that he had been searched. He breathed slowly and deeply, thinking of this, thinking of the wrecked plane and the damaged radio, of the air base from which he had come, a couple of hundred miles away.

He felt lost and alone, cold with the knowledge that he was a prisoner of an unknown race of people called the Ice Men, who lived in some mysterious fashion within a structure that resembled nothing so much as a gigantic igloo. The whole thing seemed implausible and unreal, like a delusion or a nightmare. He searched his mind suddenly, in the hope that it might actually be so. But even as he did the room about him was a solid thing of denial.

Colby stirred on his couch. He raised a hand to his head and groaned. Then his eyes opened and blinked, and his head turned as he looked about him. He saw Scott. He looked at Scott blankly, and then, with an abruptly sharpened awareness, his gaze swung back to the room. He sat up stiffly and looked at Scott again.

"What's this? Where the devil are we? The last thing I remember is that we were in the plane, and—"

Colby had noticed the guard in the doorway for the first time. He broke off, staring at the man's garments, his sharp features loosening with incredulous surprise.

Scott laughed shortly, grimly. "That's an Ice Man. We're under guard, you see. This place is the igloo thing we saw from the plane." Briefly he explained how he and Colby had reached their present location.

With a dazed expression, Colby glanced at the guard again. Then he pressed a hand against his forehead, and his lips pinched into a white-rimmed line. His eyes looked a little wild.

"Scott—we've got to get away from here!"

"I don't think these people would like that," Scott said heavily. "They probably have special plans for us. Even if we did get away, don't forget that it's a hell of a long walk back to base."

Colby quieted. Returning confidence took the strain from his eyes.

"There'll be a search for us. As soon as it becomes clear that something has happened to us. And sooner or later we'll be rescued. This igloo place isn't too hard to find."

"It'll have to be found plenty fast to do us any good," Scott grunted. "Another thing, it seems that the people here have some kind of a weapon that knocks plane engines dead. That would explain what happened to the ship we were flying."

Colby jerked his shoulders. "Even so, these people don't have a chance. Not with the Army and Air Force against them."

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

"Quite a while is going to pass before the Army and Air Force know what they're up against and start doing something definite about it," Scott pointed out with growing irritation. "There'll be investigations, arguments, delays, red tape. And in the meantime we'll be right here. Don't forget that."

Colby rubbed his jaw, frowning. He remained silent.

Scott had not ceased to be alert to the presence of the guard in the doorway. Glancing at the man now, Scott saw him look over his shoulder and then step to one side, stiffening to attention. A moment later Scott heard the sound of approaching footsteps.

A GROUP of people entered the room. In the lead was the majestically beautiful woman he had encountered at the foot of the valley wall. She was of more than ordinary height for her sex, yet there was nothing abnormal about her stature. Remembering her as he had first seen her, a towering giantess, Scott felt a deep perplexity. Had it been somehow only an illusion? Or was it true, that these people had the power to alter in size?

He remembered as well that this woman was responsible for his being a captive, and he was prepared to meet her with hostility and defiance. How much of this was due to injured pride, he did not try to determine at the moment.

He met her gaze coldly, but in the next instant his harsh intent cracked and threatened to crumble. For her expression was eager, and underlying it in some subtle yet clearly definable way was a quality of strained anxiety, of pleading. And with his barriers against her weakened, he was suddenly and fully aware of her vital loveliness.

Nor was Colby immune to her regal perfection. He had straightened at her entrance, and now was staring with an admiration which he did not attempt to hide. Her luminous gaze touched him and then returned to Scott, as though there were some atmosphere about him that commanded her interest. Scott was the younger of the two, taller and more heavily built, with long, solid shoulders and features a bit too rugged to be entirely good looking. He had copper-brown hair, thick and unruly, and deep-set hazel eyes. His mouth was wide and full, the mouth of a man who could swing from extremes of long-nourished bitterness to quick, easy laughter.

Scott grew acutely aware of the woman's gaze. Deliberately he looked from her and at the men who had followed in her rear. Only two of these seemed to have any real importance, the others being guards and minor officials of some sort.

The first man was tall and powerful, with a stern, patrician face. Ruthlessness showed in that face, and fanatic will, and there was something in his lidded eyes which suggested guileful ambition. He wore a long crimson cloak over a gold-worked tunic, knee-length and belted at the waist. A jeweled coronet was set upon his gray-shot hair, and in one hand he held a sceptre or staff, the head of which contained an ornament consisting of interlocking golden rings.

The ornament was oddly familiar to Scott. It was, he realized an instant later, a symbolical representation of the atom.

The second man was entirely different from the tall, nobly proportioned people of the igloo structure. He was short and thick-set, with blunt, heavy-jowled features. His straw-colored hair was thin across

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

the top of his round, pink head, thicker about the ears and clumsily trimmed, as though he had with some indifference been caring for it himself. He was dressed in the garments of civilization, a dark suit, wrinkled and threadbare, and a shirt without a tie, open at the throat.

The woman turned to this man and said something to him in the soft, slurred language Scott had already heard. The short man nodded quickly and smiled. His manner was servile, but it appeared to be little more than a convenient pose on his part, for his heavy-lidded eyes and fleshy lips told of a nature calculating and sly. He stepped forward now, addressing himself to Scott and Colby. His hands had come up, and in them Scott now saw a number of objects which he realized had come from his and Colby's pockets.

"You are Major Vance Colby and Lieutenant Jefferson Scott," the short man said. His voice held the taint of a foreign accent, and when he spoke again, it took on a flat quality, a note of abrupt significance. "Of the United States Air Force. So. Which of you is Major Colby?"

"I am," Colby said.

"So." The man bowed slightly. "I am delighted to make your acquaintance, Major Colby. And yours also, Lieutenant Scott. I am Emil Krass. Like yourselves, I happened to wander into the valley, and was...ah... induced to remain as a guest."

EMIL KRASS bowed again, more deeply this time, in the direction of the woman. He spoke to her in the slurred language, with evident difficulty, the names of Scott and Colby being interspersed with his words. He seemed to be explaining their identities to her. Then he turned back to the two men.

"This woman is Zetys. Her position here is similar to that of a queen. More precisely, and as nearly as I can translate it into English, she is third-order matriarch of Jira, a world in another galactic system. She has been especially trained and biologically conditioned as a spacecraft commander."

Scott said sharply, "What's all this? Just what are you talking about?"

Emil Krass' fleshy lips stretched in a thin smile. "This is an interstellar vessel, my friend, spherical in shape, only half of it being visible above the ground surface. As closely as I have been able to determine, it has been here for a thousand years. And incredible as it may sound, Zetys has lived all that time, having been biologically conditioned as I have mentioned. She is not quite immortal, but for all practical purposes that may be said to be the case. So."

Krass swept one plump hand in a gesture. "Enough of that for the moment. To go on with the introductions, this"—he bowed toward the cloaked man beside Zetys—" is Vangrud, high-priest of the god power, as he calls it. This is a worship of the forces of the atom, which the builders of this vessel had brought under a degree of control that we of this planet cannot hope to equal for the next two-hundred years. Where Vangrud and his contemporaries are concerned, however, there has been a certain amount of degeneration, and this has led to the worship of atomic forces as a supernatural thing. I understand that Zetys has attempted to discourage this, but it has been a losing fight. In the many centuries that have passed, the descendants of the original passengers of the vessel have

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

increasingly changed in outlook and belief."

Colby, who had been listening with an incredulous expression, voiced a sudden query. "But if this is an interstellar vessel as you say, what is it doing here? Why has it been here for a thousand years? How did it happen to come to Earth in the first place?"

Krass spoke briefly to Zetys before he replied. "The vessel was originally part of an interstellar expedition seeking uninhabited worlds in other galaxies. Due to faulty navigating instruments, Zetys happened to stray from the main group and became lost. Eventually she reached our sun system, and in order to conserve fuel and other supplies, she landed in this remote spot on Earth. She also hoped that a search party would finally locate her. She was, you see, obeying a cardinal rule in such cases—when you are lost in a forest, whether of trees or stars, remain where you happen to be and wait for help. Zetys has waited for ten centuries."

"Why is it that her people here haven't lived as long as she has?" Scott asked.

Krass conferred with Zetys again. He explained, "It appears that her near-immortality is the result of a radioactive process, which succeeded with only a few. These became scientists, teachers, and as in Zetys' case, leaders. Long-lived spacecraft commanders were particularly needed, since voyages between galactic systems require many hundreds of years, and so many generations go by for passengers and crew, that they are likely to forget their original purposes and objectives. Someone is needed to remind them through the years, to act as a mentor and guide. Zetys comes from a matriarchal culture, which accounts for the reason why one of her sex should have been chosen for this task."

VANGRUD had been listening to this exchange with an impatient, scowling expression. Now he spoke swiftly to Krass. His voice was deep and resonant, his manner arrogant, domineering. Krass nodded at frequent intervals, finally turning back to Scott and Colby.

"Vangrud is concerned over the fact that you are representatives of a military power. He sees in this a strong danger to the people here. Therefore he wishes to know precisely what purpose brought you to the valley."

Scott was aware of Colby's quick, questioning glance. He spoke to cover the pause, keeping his own voice and expression unperturbed and matter-of-fact.

"It's true that we're representatives of a military power, but you might explain to Vangrud that this power, the United States, is peaceful and friendly. It never makes a hostile move toward any nation or group unless first provoked or directly attacked. As representatives of that power, every move of ours is made according to its principles."

Krass smiled his thin smile. "You avoided the issue rather neatly, my friend. So." He shrugged his plump shoulders, and turned to report to Vangrud. The high priest studied Scott as he listened, his scowl deepening.

Scott abruptly wondered just how accurately Krass was translating what he had said—what was being said on both sides, for that matter. Krass was in a position where he could influence the talk to suit his own designs. Scott's distrust of the man grew stronger. Just who was Emil

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Krass? How much importance did he have among Vangrud and the others?

Vangrud spoke again, his tone incisive and curt. Nodding, Krass glanced at Scott. His eyes were lidded almost sleepily, and the sly cast Scott had noticed about them seemed more pronounced.

"Some time ago, Lieutenant Scott, an Eskimo managed to escape from the vessel and flee the valley. He was...ah...being detained for reasons of security. Vangrud demands to know if this Eskimo made contact with authorities of the United States, and if you and Major Colby were sent here as a result."

Colby said in a low voice, "Scott, better be cagey—"

"Ixnay," Scott said. "No malarkey. It won't hurt anything to come clean." To Krass he said, "Major Colby and I have no reason to conceal anything from you. We admit that we were sent to investigate the Eskimo's story. But that doesn't mean these people are in danger. The United States is a friendly nation, as you well know, Krass. If Vangrud and the others mean no harm, then they have nothing to worry about."

Scott paused, his gaze sharpening on Krass. Then, without altering the tone of his voice, he added, "Tell Vangrud that—and tell it straight. If you're trying to play a little game of your own here, I'll know about it from Vangrud's reactions. This situation is dynamite, and if you do anything to get authorities of the United States into trouble, you'll regret it."

Krass' thick mouth curled. "You are in no position to threaten me, Lieutenant Scott. I have seen things aboard this vessel which have convinced me that a military force sent against it would stand very little chance."

"Even a military force equipped with atomic bombs?" Scott suggested softly.

"Atomic bombs!" Krass scoffed. "The Jirans who built and armed this vessel were at least two centuries ahead of us in their knowledge of atomic science. There are weapons aboard that make atomic bombs look like the playthings of a child. And don't forget, Lieutenant Scott, that this is an interstellar vessel. It can be moved—moved beyond the range of the most modern military aircraft."

KRASS' grimness faded under a mocking smile. "Another thing, there is a field of force about this vessel, which affects all matter entering it in a most peculiar way. One direct manifestation of that field of force is the fact that it causes internal combustion engines to cease functioning. This, of course, is the reason why your aircraft was forced down. But to go on to a more astonishing phenomenon, Lieutenant Scott, just how tall do you think you are at the moment?"

Uncertainty struck Scott as he recalled Zetys' towering appearance when he had first seen her. He said slowly, "Judging from the others present, I'd say I was no taller than normal."

Krass shook his balding head, his mockery growing. "Wrong. You are approximately one foot tall."

Scott stared in amazement. Disbelief rose in him, but again he remembered Zetys as she had looked back at the foot of the valley wall. He had been at the very edge of the force field then, he realized, within its influence and diminished in height. Zetys, however, had been beyond the edge of the field. Her height had been normal in relation to the human

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

scale, but to him she had seemed a veritable giantess. Later she had stepped into the field, and when he had seen her again, she had been "normal" in relation to his reduced viewpoint.

Colby, too, was staring at Krass. He burst out, "You've been making some wild claims, but this story about us being a foot high is the most ridiculous of all."

"So?" Krass murmured. "I believe Lieutenant Scott thinks otherwise."

Scott nodded reluctantly. Briefly he told Colby of what he had seen in his first encounter with Zetys. Returning his attention to Krass, he asked:

"Admitting that we are only a foot high, what is the purpose of it?"

"Primarily to conserve space within the limited confines of a vessel such as this, especially with the increase in numbers of those aboard after some dozen centuries. The force field is set up in such a way that the vessel itself is not affected. Most important, and the point to which I was coming, is that the field can be so adjusted that objects entering it become so small as to be invisible to the unaided eye; so small, in fact, that for all practical purposes they cease to exist. Think of this happening to a bombing fleet, Lieutenant Scott. It should show you how impregnable we are here, and how empty your threats are."

Scott said slowly, "You're taking a lot on yourself, Krass. Just who are you? How do you fit in with all this?"

Without actually moving, the short man somehow managed a swagger, complacent and self-assured. "At the moment you might call me an adviser to the Jirans on matters pertaining to the outside world. Zetys has allowed her people no intercourse with our race, and consequently they know practically nothing about us. Vangrud in particular has come to rely on me for information.... Before ending up here, however, I was what might be called an explorer with a special interst in Alaska. My findings were considered very valuable in certain quarters. But right now I am on the threshhold of even more important information—information for which I shall be greatly rewarded."

"I get it," Scott said bleakly. "You're a foreign agent, Krass—a spy!"

"Perhaps—but bear in mind the fact that your suspicions aren't going to do you a bit of good," Krass returned, his manner calm and assured.

VANGRUD broke in with renewed impatience, questioning Krass. The latter spoke at considerable length jerking his plump hands in emphatic gestures. He concluded on a grim note, which for some not immediately apparent reason drew from Zetys a swift protest. Vangrud added his own resonant tones in what was clearly a defense of Krass, and within moments an argument ensued that left Zetys' exquisite features flushed and angry. Drawing herself up to her full regal height, she spoke sharply to Vangrud, who presently bowed in sullen acquiesence.

Krass threw a sidelong look at Scott and murmured, "You and Major Colby may consider yourselves fortunate—at least for the present. Vangrud is in favor of having you both executed immediately. Zetys, however, is inclined to be lenient. But the situation may change...and very soon."

Voicing an imperious command, Zetys strode from the room. Vangrud sent a baleful glance at Scott and Colby before he followed her out.

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Krass noticed the glance, and smiled mockingly at the two men as he left also.

Shortly Scott and Colby were alone, and the metal door to the room slid soundlessly and firmly shut. An instant before it closed, however, Scott saw two guards take up stations in the corridor beyond.

Colby sat down on one of the couches and looked dully at the floor. He shook his head slowly from side to side.

"What a mess!" he muttered. "What an insane, hopeless mess! It ...why, it's like a bad dream. I keep thinking that I'm going to wake up any second and find myself back at base."

Scott had lighted a cigarette and was pacing the room. "It's a mess, all right—and Krass is the one behind it. He's been feeding Vangrud ideas, and it isn't hard to guess what those ideas might be. I've noticed that Zetys and Vangrud keep going off in opposite directions. They can't both run this place, and sooner or later they're going to put up a fight to see who's boss—most likely sooner, with Krass egging Vangrud on."

Scott stopped and swung around to face Colby, anxiety deepening in his words as he continued. "Vangrud's inexperienced in the ways of the outside world, that's easy to make out. Krass, though, is a smooth customer, and I'll bet he's rigging up one hell of a big double-cross. Most likely he's scheming to have Vangrud take over this ship. Then he'll talk Vangrud into trying to take over the Earth, too, using that as an opening to make contact with the outfit behind him. Krass practically admitted that he's a foreign agent, and you know what that means. If the weapons and scientific knowledge of the Jirans fall into the wrong hands, it means that our own nation is doomed. Those Krass represents would set themselves up as rulers of the world. Vangrud, of course, would be eliminated quickly enough once his usefulness had ended."

Colby gripped hard at his knees, his face gray and drawn. "We've got to stop it, Scott! We've got to get out of here somehow and return to base."

"That," Scott said heavily, "is going to be anything but easy. We'll need help—inside help. The way things look, Zetys is the only person here who might side with us. But I'm not so sure about her."

Scott turned to gaze narrow-eyed at the door, and oddly at that moment he thought of Colby's use of the word, we. It was no longer "you" or "I", with a world of hostile implication behind this difference in identity. Now it was "we." Their predicament had thrown them together in spirit, and for the first time they were thinking and feeling as one

It was somehow good.

Scott smiled slightly and dropped his cigarette to the floor, crushing it out with a heel. He went to the door and beat against it with the flat of his hand.

Colby rose startledly. "Scott... what are you trying to do?"

"I don't know yet," Scott said.

THE DOOR slid partly open to reveal the questioning, wary features of one of the guards. The other stood peering over his shoulder. Both gave evidence of being alert for trouble.

"Zetys," Scott said. He pointed to Colby and himself and repeated, "Zetys."

The foremost guard shook his head with an instantly grim expression. He jerked a hand at his companion, indicated himself, and said, "Vangrud."

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Then he moved back, and the door slid shut again.

"That demonstration was enough to write a book about," Scott murmured.

Colby nodded bleakly. "They're Vangrud's men. And it seems they've had orders not to let us get in contact with Zetys. Vangrud and Krass aren't taking any chances with us."

Scott lifted his shoulders in a hopeless shrug and stretched out on his couch. "I guess the only thing left for us to do is to wait for further developments."

Reclining on the couch, he waited. His motionlessness gave no hint of the tension mounting within him.

The hours crept by with torturous slowness. The only sound in the room was the faint hum that rose from somewhere behind the walls. Beyond the door there was a deep silence.

Colby spoke only once, unconsciously, voicing an irrelevant thought that required no answer. "I wish I had a drink," he said.

The silence grew and became a thing that seemed to ache with its own unbearable weight. Then, with alarming unexpectedness, it cracked and dissolved.

From a distance, muffled by intervening metal walls, came a sudden murmur of sound. It swelled in volume and became distinguishable as a blend of individual noises, the pounding of feet, the shouts and cries of men.

Scott had leaped to his feet and stood pressed tensely against the door, listening. Colby stood beside him, eagerness and foreboding struggling for supremacy in his face.

"Sounds like all hell has busted loose," Scott muttered. "And unless I miss my guess, Krass and Vangrud are the ones behind it."

The hubub came closer. Within a short time the noises were just beyond the door, indicating that a tempestuous battle was taking place. Men screamed and cursed, and the walls seemed to quiver from the impact of human bodies.

Abruptly Scott caught at Colby's arm. "Back!" he said. "Get away from the door!"

They retreated to an adjacent corner of the room, and seconds later the door slid open. Zetys leaped into sight, her face flushed with exertion, a sword-like weapon gripped in one slim hand. Her cloak was torn and singed as though by flame. She had lost her tall fur headpiece, and her silken hair fell in a disheveled tumble about her shoulders.

She glanced swiftly about the room, relief springing into her face as she saw Scott and Colby. In the doorway behind her a number of men and girls crowded. Their expressions were curious and friendly, despite the still visible strain of battle. All held a variety of strange-looking weapons.

Zetys gestured—and then, with stunning surprise, she broke into intelligible speech. "Come with me," she said. "We must leave here quickly. Even now Vangrud is bringing up new forces for a counter-attack."

Scott moved his head in a swift nod and strode forward. "We're with you. Let's go!"

"A moment." Zetys turned to the gathering behind her and spoke hurriedly. A ripple of motion started somewhere at the rear of the massed figures, reaching back into the room. Zetys was handed two slim, cylindrical objects, each with a handgrip at one end. She turned these over to Scott and Colby, revealing them as weapons and explaining their use. Then she called a command, and within instants Scott and Colby were running beside her as the rescue party hurried through the broad corridors of the Jiran ship. Scorched walls and fallen figures along the way gave evi-

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

dence of the furious struggle that had taken place.

A GROWING clamor of excitement resounded throughout the ship. Listening, Scott realized that other battles were now being waged.

Zetys caught his glance and explained rapidly, "My followers and those of Vangrud have long been divided against each other. Little was needed to hurl them into war. Word of my action has spread everywhere within the vessel, and now there will be a fight to the death."

"How much of a battle will Vangrud be able to put up?" Scott asked.

"His forces are superior in numbers," Zetys returned briefly. "But I have a plan that may bring about his defeat. Everything rests on whether we can reach and take possession of the heart of the vessel, the control center."

Nothing more was said as Zetys' hurrying band of partisans reached a broad stairway and streamed upward along it to a higher region of the ship. Another series of corridors appeared ahead, and the breathless race continued unchecked.

Panting with effort, Scott wondered how much further Zetys and the others had to go before reaching their destination. The alien ship seemed awesomely huge. After a moment he flung a question at Zetys.

"How close are we to this control center you mentioned?"

"Quite close. It is on the next level."

Crashing noises and distant screams rose above the tumult that filled the great sphere. Occasionally Zetys' advancing band encountered besieged companions and small groups of enemies. Brief, fierce clashes followed, and the trip was resumed. The rescued sympathizers, where that happened to be the case, immediately joined Zetys' group.

Another stairway was reached, and once more the band mounted upward. Hope rose within Scott. This was the level on which the control center was located. If Zetys were able to take possession of it, the schemes of Krass and Vangrud would come to a quick end.

Now that their goal was close, Zetys' followers swung through this final series of corridors at an even faster pace. Excitement flowed like a current among them. There were eager whispers, swiftly exchanged glances. Hands tightened on weapons, eyes glittered in mounting tension.

Then, as the strung-out line of hurrying figures reached a cross-corridor, disaster struck with numbing speed. Shouting and brandishing weapons, a mob of men and women erupted from both ends of the intersecting passage and threw themselves upon Zetys' surprised band.

To Scott, who with Zetys and Colby was situated some distance back, it was not at once clear what had happened. But within seconds he realized that Zetys' group had been attacked by an opposing force of Jirans, allies of Vangrud. The attacking party had evidently been on its way to the control center also. Discovering the approach of Zetys and her partisans, they had set an ambush.

For a space of several seconds the attackers enjoyed their advantage of surprise, cutting deeply into the foremost ranks of Zetys' followers. Then, recovering from their dismay, the besieged Jirans gathered themselves together as a fighting force and began putting up grimly determined resistance. A maelstrom of battle filled the corridor from wall to wall, broken into little whirlpools of individual combatants, heaving back and forth as a mass. Shouts and screams lifted. Bodies leaped and twisted, rose and

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

fell in a kaleidoscope of action. Strange Jiran weapons flashed and hissed amid the confusion, generating a heat that clogged the air and filled it with the odors of scorched fabric and burned flesh.

ZETYS WAS shouting orders, and shortly it became clear what it was she wanted done. Her followers began pressing back against the walls of the corridor on either side, thus putting Vangrud's cohorts between them, and in this way catching them in a deadly cross-fire.

A number of the more reckless and swift-moving among the attackers managed to penetrate this seething lane in safety, with the evident purpose of reaching Zetys. Almost before he knew just what was happening, Scott found himself confronted by a savage-faced opponent, who caught at his throat and lifted a club-like weapon high. Deliberately Scott threw his weight against the man, catching him in the groin with an up-flung knee. The grip about his throat loosened, and while still locked together, Scott brought up the muzzle of his cylindrical weapon and pressed the firing stud. A bolt of flame tore into his antagonist, and the man dropped, to be immediately trampled underfoot.

Scott fired again as a second man leaped toward him. Then he whirled to where Colby, nearby, was struggling with two Jirans, a man and a muscular, wild-eyed woman. Sending a bolt of flame into the man, Scott caught the woman from behind, pulling her away from Colby and hurling her to the floor, where she was quickly lost in a tangle of legs. Colby, it appeared, had lost his weapon. He located another now, grinned briefly at Scott, and threw himself back into the battle.

A short distance away, Zetys and a lone companion were jammed into a close-packed struggle with three men. Zetys' shining hair lay in a tangle about her head, and blood seeped down from a shallow wound on one temple.

Scott dispatched one of the men, and then, as Zetys' companion fell, he darted at a second and clubbed him to the floor with a violent sweep of his fist. Zetys accounted for the third man, and in the next instant Scott felt a rush of searing heat past his ear. He ducked and whirled, seeing Colby fire a bolt into his attacker before the man could aim his weapon again.

"That makes us even!" Colby panted at Scott.

Glancing swiftly around, Scott saw that this portion of the battle scene had been wiped clean of enemies. But Zetys' band had been outnumbered to begin with, and now the fight was going against them. Already her exhausted, despairing supporters were pushing their way past in a growing retreat.

Zetys looked hopelessly at Scott. "My plan has failed. We cannot hope to reach the control center now. My followers have been reduced in numbers, and there will be no time in which to obtain reinforcements. Vangrud has been warned. He will now be alert."

Scott ran a hand over his sweat-streaked forehead and frowned in thought. "I think we still have a chance...a mighty slim one, but it's the only one left." He explained in brief, hurried sentences.

Zetys hesitated, then nodded her head, a wan hope struggling in her eyes. Scott spoke swiftly to Colby, and together they bent to the fallen figures that lay nearby, stripping them of their outer garments. Then Scott turned back to Zetys.

"All right, let's get away from

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

here!"

FIRST a trickle, the retreat was now a flood. With Zetys and Colby, Scott plunged into the disorganized mass of running figures, following the flight down the corridor, back along the route by which they had come.

Scott kept glancing about him repeatedly as he moved. After some distance had been passed, he saw a gaping doorway. Signalling to Zetys and Colby, he darted into it. The maneuver went unnoticed in the confusion, and Scott slid the door shut. He remained there, listening, as the retreat pounded by, with Vangrud's victorious cohorts in hot pursuit.

Assured finally that his stratagem had not been detected, Scott turned his attention to the room in which he and the others had taken refuge. It consisted of three luxuriously furnished compartments, all deserted. Scott jerked his head in a gesture at Colby, then, with the Jiran garments they had taken, they hurried into one of the other rooms. There they removed part of their outer clothing, substituting it for Jiran garb. Scott felt a brief flash of humor as he took in Colby's exotic appearance, knowing that he himself looked just as strange.

They rejoined Zetys, who examined them critically and nodded. "You would not survive a close inspection, but I think you will do for the plot you have in mind."

Scott questioned her as an abrupt thought struck him. "How is it that you are able to speak my language? I assumed you didn't understand it, since you let Krass do all the talking."

Zetys smiled slightly. "I have lived for a long time, remember—a very long time. Numerous persons have found their way into the vessel during the last century or so, and from certain of these I learned to speak English. But I did not trust Krass, and concealed my knowledge from him. I hoped in this way to learn of possible treachery."

"Then that's the reason why you decided to take immediate possession of the control center," Scott said. "Krass talked too much. He dropped a hint of his and Vangrud's plans, not realizing that you were able to understand what he said."

Zetys nodded, and Scott felt a sudden admiration for her. At the moment he seemed to see her more clearly than he had been able to do in the tumultuous rush of events, and her loveliness was suddenly sharp and vivid before his eyes. It seemed to radiate through the stains of battle covering her, bringing an ache of wistfulness to him. With an effort he turned away, striding to the door.

Except for strewn figures of the dead and seriously wounded, the corridor was deserted. Vangrud's minions had pursued Zetys' defeated band into some more remote part of the ship. It was precisely the situation Scott had hoped would take place.

He gestured to Zetys and Colby, and together they hurried out into the corridor. Zetys paused only long enough to snatch up a fur headpiece that lay near the body of a woman, arranging this so as to conceal her face. They began running then in the direction they had originally been taking when attacked.

"If we meet any of Vangrud's men, keep moving," Scott said. "Don't stop or hesitate. We've got to get across the idea that we're on Vangrud's side. If any questions are asked about our reason for entering the control center, our story will be that we have a message for Vangrud, concerning Zetys."

Scott glanced at the woman.

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

"You'll do the talking, of course. Think you'll be recognized easily?"

She indicated her disheveled appearance. "Like this, no. Further, I have kept much to myself of late years. Perhaps that has been my mistake. My people have gradually grown apart from me."

THEY PASSED the intersection, continuing toward the end of the corridor. As they neared this, a group of armed men appeared, hurrying forward upon a mission of some sort. Faltering only slightly now that the test had come, Scott and the others continued their advance.

The group of men slowed in apparent suspicion. Fighting was still in progress throughout the Jiran ship, and it was difficult as yet to tell friend from foe. Noting the uncertainty of the group, Scott instantly raised a hand in friendly fashion, and Zetys, taking his cue, spoke a few brief words containing Vangrud's name.

The men grinned and drew aside to let them pass. They reached the end of the corridor and turned into a very wide curving passage. Numerous groups of people were present here, some merely standing about and talking in excited voices, others hurrying away on mysterious errands. A confused babble of noises filled the air.

"This is the heart of the ship," Zetys explained to Scott. "Here were once the executive offices, the pilot room, and the various other departments necessary to the function of the vessel. It is known as the control center. Vangrud uses most of it now as a sort of temple for the worship of what he calls the god power, which is nothing more than the energy of the atomic engines. I realize now that he must have seen the importance of the control center in the event of a mutiny, which is why he made it his headquarters.... I had been too sunk in boredom and unhappiness to pay much attention to what was going on around me. If I succeed in regaining my authority, however, all that will be changed."

They continued at a walk, Zetys slightly in the lead as she guided the two men toward their destination. Glancing about, Scott was reassured to note that their progress was drawing little if any attention.

A short time later, Zetys threw a warning glance over her shoulder, and Scott saw that they were approaching a huge doorway, its double sliding panels partly open. Evidently, he decided, this was the entrance to the control center proper. He felt his pulses quicken, felt tension knot-like within him.

A cordon of grim-faced men and women stood before the doorway. They held ready weapons and gave every indication of being on the alert for trouble. Beyond the sliding doors, more armed Jirans were visible.

With a pretended air of importance, Zetys strode directly up to the cordon. She spoke in a roughened voice to the figures nearest her, a hard twist to her lips. An instant later a man strode forward, his gold-worked tunic and the diadem at his forehead indicating him as an officer of high rank. This man questioned Zetys, and she replied curtly. Scott heard her mention her own name, and that of Vangrud, and he knew she was giving the story which had previously been arranged.

The officer hesitated. He glanced searchingly at Scott and Colby, and for a moment Scott felt a band of ice tighten around his chest. Then the officer seemed to reach a decision, nodding his head and gesturing for Zetys and her companions to follow. He led the way past the cordon and

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

through the huge sliding doors, then through a series of halls, until presently he came to another doorway, smaller than the first. As they were about to enter this, a man emerged and began impatiently to push his way past. Then the man stiffened, staring first at Scott and next at Colby and Zetys.

It was Emil Krass.

Krass' heavy-jowled features twisted in a grimace of alarm, and his thick lips parted for a shout.

URGENCY was a wild drumming in Scott. They couldn't fail now, not after they had come this far! He knew they must not fail. He exploded into frantic motion.

Before Krass could complete his shout, Scott clutched at the still uncomprehending officer and gave him a violent shove. The man bowled into Krass, and both went sprawling.

"Go ahead!" Scott snapped at Zetys and Colby. "Hurry!" He shoved them toward the doorway, crowding on their heels as they tumbled through. Zetys whirled to slide the door shut, operating a lever mechanism to keep it locked.

"It will hold long enough!" she said.

Scott nodded. "All right, come on! We've got to find Vangrud!"

He saw that they were in a long room, around the walls of which were charts and innumerable instruments, and in the center, a complicated rectangular device that looked like a calculating machine. There were also four men in the room, all in gold-worked tunics and with diadems at their foreheads. The men had been staring in bewilderment at Scott and the others. Now, their glances narrowing, they whirled to reach for weapons.

Scott brought up the cylinder in his hand and pressed the firing stud. One of the men dropped as the bolt hit him, and then, as Scott shifted the muzzle of his weapon, a second fell also. Zetys and Colby were now firing as well, and within instants the two remaining men joined their companions on the floor.

"Priests of Vangrud!" Zetys said breathlessly. "We are well rid of them!"

They ran through the room, emerging into a great circular chamber. There were more instruments and machines here, rising in tiers about a huge central mass. A deep, droning sound pervaded the place, underscoring its atmosphere of tremendous, leashed power. Among the tiers a dozen or so priests in the now familiar gold-worked tunics worked busily over various controls, unaware as yet of the three intruders.

Zetys caught Scott's arm and pointed. On one of the lower tiers was a broad, clear space, and here, seated before a desk on which were numerous Jiran communication devices, was Vangrud. He was speaking swiftly into the instruments before him, obviously receiving reports and giving orders. He also was unaware that his stronghold had been invaded.

Scott drew Zetys and Colby to one side, where they would be hidden from direct view by the bulks of the nearest machines. Using these as cover, then, they stalked toward Vangrud. They reached the first tier and worked their way among the machines to the second. Still they remained undiscovered. The space where Vangrud was situated was now only a short distance away.

Scott's breath seemed to pound in his throat, as with Zetys and Colby he crept toward the final tier. Then only a single machine remained as concealment. Vangrud's desk, across the clear expanse, was now a mere several yards away.

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

With a grim nod to the two beside him, Scott darted from cover and ran toward the desk.

Vangrud looked up with a startled expression. Dismay came into his face. He started to his feet.

Incrediby, then, he smiled.

And in the next instant, plunging toward the desk, Scott felt himself tear through an invisible something that flashed at his touch and struck darkness into his mind.

He fell, and did not know that he fell.

SCOTT NEVER knew how much later it was when he became aware of returning consciousness and finally opened his eyes. He felt cold, hard metal under him, and he sat up.

Zetys and Colby lay nearby. Colby stirred as Scott watched, and a moment later Zetys' eyelids began to flutter. One after the other, the two straightened and looked dazedly about them.

They were in a small room, bare and metal-sheathed. Scott needed only a glance at the room to know that they were prisoners. A sick bitterness flooded him as he thought of what had happened. Victory had been within inches of their grasp, and then had come sudden, complete defeat.

Colby rubbed a hand over his forehead, frowning puzzledly at Scott. "I don't get it. What made us blank out like that?"

"Vangrud had a screen of force about the desk," Zetys said in a weary, hopeless voice. "I underestimated him, it seems. Somehow he managed to learn more about the scientific apparatus aboard the vessel than I had thought he was able to do." She glanced sadly at Scott. "I am sorry. Vangrud's triumph means great danger for your world, of course."

"We did the best we could," Scott sighed. More to hide his expression than anything else, he turned to the door, examining it briefly. It was tightly shut, as he had known it would be. He shrugged and sat down against a wall.

Silence filled the room. There seemed no need for words. Scott knew that Zetys and Colby were thinking about the same thing that concerned him—the fate Vangrud held in store for them. Whatever that might be, Scott felt certain it would be unpleasant.

Presently footsteps sounded beyond the door. It slid open, revealing four men, bleak of expression and heavily armed. With Zetys and Colby, Scott was marched from the room. They were taken back to the circular chamber and up along the tiers to a spot that was evidently an important control station.

A group of Jirans were waiting here. Dominating them with his arrogant presence was Vangrud, and at his side stood Krass, a malicious grin twisting his fleshy lips. The grin broadened as Scott and the others were brought up and thrust forward.

"You caused us a number of anxious moments, Lieutenant Scott," Krass murmured. "Fortunately, however, you did not succeed in creating any serious harm. Now you are going to pay for your meddling."

Scott looked at the man with hungry, burning eyes. He felt at the moment that he would have died gladly, if it were possible first to choke the life from Krass' evil body.

Vangrud turned coldly gloating eyes from Zetys and spoke to Krass. The latter nodded and returned his attention to Scott. He gestured at a narrow metal door, set within a recess at the center of the station. In-

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

struments were banked thickly at one side of the panel.

"Do you see that door, Lieutenant Scott?" Krass demanded. "Behind it is a chute that leads directly into the atomic converter at the base of this huge machine. What Vangrud tells me about the temperature of the converter makes the heat of a blast furnace seem cool in comparison."

Krass smiled again. "You are going to learn just how that temperature feels, Lieutenant Scott. Zetys goes into the converter first of all, as befits a lady of her rank. Then you and Major Colby will follow. Vangrud is offering the three of you to the god power as a reward for his victory. Romantic, perhaps, but effective—very effective, I should say."

SCOTT struggled suddenly against the men gripping his arms, rage and despair filling his mind. His efforts were futile. Other Jirans quickly clutched at him, holding him helpless.

Vangrud turned toward the narrow door and lifted his arms. He began a quickening chant, that rose in volume and ended in a shout. Then he whirled around, snapping a command.

One of the priests turned to the banked instruments beside the door, pulling a lever. The door slid slowly to one side, and as it did so, a blast of sudden heat rushed from the opening.

At another command from Vangrud, Zetys' guards pulled her toward the opening. They poised her there a moment as they prepared to thrust her down the chute and into the unthinkably incandescent mass below.

Scott tensed his muscles for a last defiant gesture of protest.

He never moved.

Somewhere within the control center a siren began to shriek. The nerve-grating sound burst like an explosion into the tense quiet. It struck a paralysis into Vangrud and his cohorts, turned them into blank-faced statues.

Zetys whirled to smile in amazed delight at Scott. "The signal!" she cried. "The signal! Another Jiran vessel approaches! We have been found!"

Her voice broke Scott's own trance. The hands gripping his arms had loosened, and now he broke from his guards. Bowling men from his path, he threw himself at Vangrud. Belatedly the high priest sent a hand darting down to a weapon in a belt at his waist. Fear made a twisted mask of his face.

Scott struck the weapon to the floor. He grappled with Vangrud for a moment, twisting and heaving in a sudden pandemonium. Then, beating the resistance from the Jiran with savage hammering blows of his fists, Scott grasped him, swung him—and threw him bodily into the converter chute.

With a thin, wild scream, Vangrud disappeared from sight.

Colby had escaped his own guards, hurling himself at Krass. His struggle with Krass was fierce, but brief. One of the guards at the scene produced a weapon, waiting for a chance to fire at Colby. The chance seemed to appear, and the Jiran fired. An instant before, however, Krass twisted into the line of fire, sagging against Colby as the bolt struck into him, taking life and movement from his body.

The other guards had readied their weapons by now. But the opportunity to use them never came.

For Zetys had slipped quietly to the instrument bank during the confusion. She stood there now, her hand grasping one of the levers. Her voice cut into the turmoil, and her tone as

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

well as the content of her words brought a swift panic to the Jirans, freezing them into rigidity. Seconds later they dropped their weapons to the floor.

"I threatened to destroy the vessel," Zetys explained as Scott hurried to her side. "I had only to pull this lever to release the full power of the converter in one terrible blast."

"It's over then," Scott said. "It's over—and we've won!"

JIRAN conversation rose in a festive murmur about the banquet table. Scott sat between Zetys and Colby, and on the other side of Zetys was the immortal female commander of the newly arrived search vessel. The two women were deep in conversation, filling in a gap of a thousand years.

Methodically Scott wielded a scoop-shaped eating implement to clean the last of the numerous small bowls before him. The meal had consisted of a variety of synthetic pastes and jellies, which, while undoubtedly nourishing, did not give him the satisfaction that an Earthly meal would have supplied. He sipped at a goblet of green liquid, then, and glanced with a kind of contentment at the eager faces about him.

With Vangrud's death, the mutiny had swiftly dissolved, and a military force sent over by the commander of the search vessel had aided Zetys to restore quick order. Peace now reigned throughout the vast sphere, and what was more important, the Jiran arrivals had fired Zetys' people with a new life and enthusiasm. The present banquet was, in a way, an acknowledgement of that.

Zetys turned to smile at Scott. "Have I been neglecting you?"

"Oh, no," he said. "All this has been very interesting." He studied Zetys quizzically. "What are you going to do now? If you intend to remain on Earth, I'm sure you'll receive an enthusiastic welcome. It would be one of the most exciting things that ever happened to the people of my world."

Zetys shook her head reluctantly. "To remain here would be pleasant, I admit, but I am afraid it is impossible. You see, it is a Jiran law never to interfere with the culture and development of another race. The impact of Jiran science on the science of your race, for example, would cause a tremendous amount of interference, as you must surely realize."

Slowly Scott nodded. "You're right, of course.... You know, this is a great adventure—to me, at least. I'm strongly tempted to remain here."

Zetys' smile grew wistful and sad. "You would not be happy. The Jirans are another race. The differences between us are really much greater than appear on the surface."

Scott sensed that there was something else which Zetys was leaving unsaid, but he understood it with painful clarity. There was a chasm of a thousand years between them—a chasm that could not be bridged.

He sighed and nodded. "I'll have to go back, I guess."

"I will see that you are safely returned to the military post from which you have come," Zetys said. "It will have to be done in such a way as to avoid discovery—under cover of night would be best. The clothing belonging to you and Major Colby will be found and returned, and of course, once beyond the force field which surrounds this vessel, you both will be restored to normal height. ...As for myself, I am going to a world in a distant sun system that has been colonized by my people, following the search vessel in my own."

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Scott felt a lingering regret that it had to end this way. He knew he would never forget Zetys.

Colby, who had been deep in thought during the meal, now turned to Scott. He grinned uncertainly. "You know, Scott, I've been thinking about that testimony I gave, and ...well, I've realized how wrong I was. I guess I didn't know you. What we've been through has opened my eyes...And, Scott, when we get back I'm going to do everything I can to see that you get the promotions you have coming."

"Thanks," Scott said, sincerity roughening his voice. "You're a pretty decent guy yourself, Colby. I guess I didn't know you either."

They grinned at each other. Then they gripped hands, hard, acknowledging the bond that their experience had forged between them.

THE END

MAN VERSUS METAL

★ By CARTER T. WAINWRIGHT ★

AN EXCELLENT definition—one of the best—which differentiates between men and animals, says that the major distinction between them is that Man is a "tool-using" animal. This is certainly sound because animals to an extent have most of the other faculties of men—but *that* one.

In considering such a hypothetical question one is inclined to ask, "what is Man's most important tool?" And the answer comes easily—it is the art of writing, of printing, of being able to record experience. But this is in a little higher realm. Among all the actual tools which have shaped our civilization, what is truly the most basic one? This too is easy to reply to.

It is the lathe! There is nothing complicated about the tool—at least in its simpler aspects—but it is the key to modern civilization and industry.

When the first screw-cutting lathe was invented in France and eventually built into the Englishman's, Maudley's machine, Man had arrived at the point where nothing was impossible. The back-geared, screw-cutting lathe, carrying a lead screw, is capable of producing such an infinite variety of forms in so many different materials that it is the most important tool ever built. All other machines are mere adaptations of it, from milling machine to drill press.

Several science-fiction writers have imagined the development of civilizations in which such tools do not exist. Invariably their imaginary lands must appear limited—their imaginary worlds do not have an appreciable development. Watch a skilled machinist sometime operate a lathe, whether it be a small watchmaker's machine or a gigantic naval gunfinishing machine—you will see artistry and craftsmanship at its height. And you will be watching the source of all your luxuries and comforts!

TRIAL BY FIRE

★ By WILLIAM KARNEY ★

SYSTEMS FOR testing people are now employed by almost every kind of an organization which has to employ human beings. It is likely that in the future this testing be even more important because the qualities of reliability, calmness, courage under stress and similar things, will be of the greatest value. You can't have a rocket pilot subject to jitters or depressive tendencies.

Well, a good many of the rules of testing have been worked out by psychologists. During the last war, this was strongly emphasized. The Office of Strategic Services, which was concerned with gathering information from enemy held territories and which desired to do damage to the enemy behind his lines, required hundreds of men with definite capabilities and certain types of reactions. The question was how to select them.

First psychologists of the OSS learned that looks counted for nothing. A tough appearing man might be an emotional child, incapable of standing up under the slightest strain. So they evolved a system of testing which really separated the "men from the boys."

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Those men selected to serve as candidates with the OSS were pulled from their respective branches of service or from civilian life and gathered together in groups of a hundred or so. This was done with secrecy and without regard to rank. A colonel might find himself next to a private or next to a ditch-digger without ever knowing it. Then the men were given problems to solve ranging from handling a half dozen other "testees" in building a bridge to conducting a tea party. All the while they were under the careful scrutiny of hidden or disguised psychologists. Efforts were made to arouse anger and hatred, dispair and disgust within the men being tested. Their reactions were observed. It was easy under these conditions to separate the ones likely to break down from the ones who couldn't be broken down under any circumstances.

A man might be told in total darkness to hang from his fingertips from a cliff. Then he'd be ordered to let go. The distance to the ground at the edge of the fake cliff would be ten inches, but the men wouldn't know that. Some would screamingly refuse to let go. Others would do so without a murmur.

Fights would be started, insults would be bandied about, hatred and distrust would be created. In this emotional laboratory, in this crucible of human weakness, the feeble would be separated from the strong.

And it would be found that "background" used in the conventional sense, would have almost nothing to do with the emotional stamina and strength of the prospective OSS men. The ones who passed would be selected for their jobs as suited their capabilities. Whether the system worked or not can be seen from the fact that the OSS had almost no trouble with its trained killers and after a time other branches of the service clamored for men selected by a similar process. Probably in any future war or any future trip—such as rocketry will sponser—similar testing methods will be employed so that the risk of failure will be minimized.

VICIOUS VIKING

★ By H. R. STANTON ★

THE U.S. NAVY is on the ball too. It knows the score. Any future war, be it on land or sea, is going to be a war fought with rockets and guided missiles. As a consequence of the realization of this, the Navy has been pouring plenty of money into rocket research, less publicized than the Army's work, although it is taking place at the same research area, White Sands, New Mexico.

Aside from anti-aircraft rockets, small guided missiles and similar weapons, the Navy is engaged on a research program of heavy liquid fueled rockets. It is working on a rocket called the *Viking*, the first American rocket comparable with the German V-2. The Army's *Wac Corporal* cannot be compared with the V-2. It is a stepping stone to the latter so to speak. But the Navy's *Viking* can very well be analyzed in terms of the V-2. The *Viking* is an improvement of the V-2.

It is a slim vehicle, a little shorter than the V-2 with a pencil fuselage. It is liquid powered and weighs but five tons to the V-2's twelve. It has been test fired once, reaching an altitude of about fifty miles with a velocity of twenty-five hundred miles an hour. But this was merely a test, an aerodynamic experiment.

The second *Viking* now being assembled at the Glenn Martin plant in Baltimore, will be fired with these expectations at White Sands shortly. It will reach an altitude of two hundred miles (the V-2 hit about a hundred and twenty) and will attain a velocity of five thousand miles an hour (the V-2 did thirty-six hundred). The payload of the *Viking* is only a hundred pounds or so compared with the V-2's one ton warhead, but here the objective is rocketry, not destruction. Enough instruments can be carried by the Viking to serve their scientific purpose. The attitude toward the Viking is that it is to be regarded as one of the forerunners of the first Moon rocket.

It is a private opinion that the Viking may be the top step of a potential step-rocket, the second portion of which remains to be constructed though it may be on the drawing boards now. This second portion will be a vastly improved V-2 capable of carrying a Viking in its nose; much as the Army's set-up sent up a V-2 carrying a Wac corporal for an altitude record.

It would be interesting to know exactly what is going on behind the scenes at White Sands where this rocket activity is not very well publicized. While military research is the main objective it is certain that the scientific minds doing the work, are certainly speculating on the possibilities of the tool with which they are working.

With each passing month, the first Moon rocket comes one step nearer to reality. We wait with bated breath the announcement that the attempt is to be made. It is known that a great deal of excellent and promising knowledge is being learned about fuels, particularly liquified hydrogen. And that combined with liquid oxygen means that the exhaust velocities necessary for earthly escape are getting within sight. Here's to the Viking—one more advance toward Man's greatest adventure!

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

The INSANE ROBOT

By CRAIG BROWNING

THIS particular morning I was digging among the flowers. I was sort of humming to myself, feeling kind of at peace with everything—if you're a gardner and know what I mean. I'd been a trusty for two months already, which was quite an achievement for me—or so Dr. Walters said.

But I'd learned my lesson and I guess the docs thought I had too or they wouldn't of made me a trusty. And I was on my hands and knees in this here flower bed, pulling out nonexistent weeds that the trusty that had weeded it the day before had missed when he was pulling out weeds where there weren't any to pull.

It's a nice racket, and the main object of it, of course, is to keep the nuts—they include me in that category although, as you will see as you go on that I'm not one at all—from just laying around and looking like nuts even from a distance. I'm Lefty Baker, victim of circumstances.

That is, I WAS a victim of circumstances, but on this particular day I was firm in my resolve to have nothing whatever to do any more with scientists. If I could stay away from those guys a few more months I'd be a free man again.

I'd been snared into the booby hatch by an exteroceptor deceptor. I'd met poor old doc Winters and helped him to escape and perfect his experiments on immortality, using rabbits to try it out on. He'd succeeded, too; but the rabbits got loose and the doc had died of a stroke over it. When I tried to warn the farmers about the menace of the immortal rabbits the sheriff had recognized me. I ran for it, but wound up back in the booby hatch anyway. A few weeks later the papers reported a lot of rabbits all swelled up wandering around in a daze, and dying soon after they were caught. When I talked with doc Walters about it he said if I was telling the truth they died of penicillin allergy, whatever that is. But he said it like he knew I wasn't, so I didn't say anymore. The less you say in this place the better. They rush to the office and write it all down and refer to it later.

As I said, I was digging among the flowers—I picked that expression up from a poem in a mimeographed magazine called Spacewarp that my room mate, Cleve Horntuttle, gets every month. Pretty nice, huh?

And I was firm in my resolve never again to listen to anybody that was nuts. No more exteroceptor deceptors. No more immortal rabbits.

Then this new guy comes walking across the lawn right up to the flower bed where I'm on my hands and knees. He stops at the edge of the flower bed and stands there watching me. I don't pay any attention to him, suspecting that he wants to talk to me. After a minute or two he speaks up.

"Say, fella," he says, casual like. "You don't happen to have a small crescent wrench on you, do you?"

THAT gives me quite a start, because just that morning I had swiped one from the janitor when he

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

To Lefty the guy was just another one of the patients — that is, until the day he opened his neck and tightened a few "nuts"

Lefty dropped the hoe from suddenly numb fingers. His eyes stared in amazement as the patient took the crescent wrench and deftly inserted it into his open neck . . .

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

wasn't looking. I get suspicious right away and ask cautiously, "Why do you ask, my fine fran?"

"I have a loose nut," he comes back, smooth as they come.

"My, how frank you are!" I says, sarcastic like. "Do you think a SMALL crescent wrench can fix you up?"

"Oh, yes," he comes back. "It's just a small nut."

Not being able to think of anything more to say, I reach in my overall pocket and give him the wrench.

Would that I hadn't a done it, as my kid brother who graduated from high school would say. When I saw what he did with it I realized that I shouldn't a, but it was too late then.

This guy takes the wrench, see? Then he sticks a finger in his neck a special way and twists it, and part of the skin on his neck pops loose like a cover on something.

He reaches in with one hand and feels around on what should have been his neck bones, but which was shiny metal rods instead. He finds the loose nut and tightens it up with the wrench, cool as can be.

When he gets done he twists his head around a few times experimentally, gives a satisfied grunt, pops the skin cover back in place and hands me back the wrench.

"Thanks," he says. Then he justs stands there.

"You're welcome," I says, just as cool—cool? I was cold!

I stick the wrench back in my pocket and get down on my hands and knees and start digging among the flowers.

He still stands there.

"No more, Lefty Baker," I mumble to myself. "Never again. Nothing doing. No more."

But he still stands there.

Finally I can't take it any longer. I straighten up and look him square in the eye.

"All right," I says, snarling. "You're a robot. So what? And you're just as sane as I am, but when you tell people you're a robot they think you're crazy. Right?"

"Oh, but I AM crazy," he objects in a mild tone of voice. "That's why professor Hamfeather had me put here."

"On your way, Bub," I says. "When there's a professor mixed up in it I'm out of it."

He gets a hurt look on his face.

"All right," I say consolingly. "So you're crazy. How does it feel?"

"Not bad," he comes back. "But it was a sad disappointment to professor Hamfeather. After all the work he did to make me, and I had to turn out nuts."

"Why didn't he make another robot to turn out bolts?" I ad lib.

"You don't understand," he says. "I'm not normal. I DO things. They work, too; but they're impossible, so that makes me abnormal."

"Like what, for instance?" I ask. (Would that—!)

"I'll show you," he says. "Come with me."

We go across the lawn to the main building and go into the men's rest room. He takes a paper cup out of the dispenser, then brings a small bottle out of his pocket. The bottle is tightly corked, but it looks empty to me from where I stand.

He takes the cork out and very carefully tips the little bottle over the edge of the paper cup like he's pouring something.

"Woops!" he says, and makes like he's pouring some of it back. Then he fills the cup with water from the faucet.

"Taste it," he says. "And tell me what it tastes like to you."

"Tastes like plain drinking water

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

to me," I says skeptically after taking a swallow.

"See?" he says. "It works! It always works! That's why I'm crazy."

"What works?" I ask, puzzled.

HE LOOKS around to make sure no one else is there. Then he lays a finger importantly on the little bottle and bends forward slightly, looking very mysterious.

"This," he says in a whisper. "Is the greatest thing since man discovered fire. It's greater than the atom bomb. It's even greater than the steam engine."

"What is it?" I ask, backing away a little.

"This little bottle," he says, taking a step to catch up with me. "Contains —believe it or not—TEN THOUSAND GALLONS of dehydrated water! Think of it! TEN THOUSAND GALLONS! Think of what a boon to mankind it is. I put a little in a paper cup and added the water to take the place of the water that was taken out when it was dehydrated—and presto! A paper cup full of what tastes like—and IS—drinking water! You said so yourself."

"Look, rob," I begin.

"My name's James," he interrupts.

"Look, James," I say seriously. "You're crazy."

"I know," he confides. "Take this—impossible—and yet it works. But," his voice takes on an eager confiding tone. "This is the least of the things I have—"

I take a powder, bumping into doc Walters as I go out the door. While he is trying to catch his balance I go out the front door trying to keep mine.

I go back to digging among the flowers, but somehow it don't seem so relaxing like it was before.

WHAT WITH my losing my ground privileges for a week on account of bumping into doc Walters without stopping to apologize, and then refusing to say why I was in such a hurry when they wanted to know why, I didn't have to worry about bumping into James, the insane robot, for awhile. There was another page in the file on Gregory (Lefty) Baker, saying that he (that's me) had developed a new symptom that might be significant. Then they send me back to ward B and tell me if I behave like a normal nut and just sit quietly and look off into space for hours at a time without attacking anybody or pulling my hair out I can have my ground privileges back again.

So I sit very still and look off into space for three days in perfect contentment, considering it protective custody. Every time I think of James I get goose bumps and realize how lucky I am to be where he can't get at me.

Then on the fourth day they tell me the front office called to say there was a visitor to see me. I'm overjoyed because the only one it could be is Pokey, my old pal, who ran out on me when the cop picked me up with that exteroceptor deceptor.

As I say, I'm very happy because I think maybe Pokey is in the dough and has made plans to spring me—otherwise why should he stick his neck out by coming within ten miles of the joint?

I hum to myself while they give me a quick shave and slick down my hair. Then they take me to the visiting room on the first floor and shove me through the door of one of the little little rooms where there's a couple of chairs, a table, and a rug—all made in the occupational therapy shops.

When they shove me I trip and do a jig half way across the room before I catch my balance. As it turns out, it's a good thing, because I'm solidly

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

planted on the floor with both hands on the table to hold me up when I see the visitor.

In this place you see dames with hospital haircuts, nurses with white uniforms, and you sort of forget there are any other kind after a while. So when I see a fifteen dollar permanent wave, a nice dress filled out just right, a pair of manicured hands, lipstick of just the right shade, blue eyes with long lashes framing them, and a flawless face that has on it a nice smile and everything that goes with the right side of the tracks I feel the weight of my body go into the palms of my hands on the table.

I have not felt like this since the time I was dealt four deuces in no limit draw and with a couple of hundred dollars in the pot I drew a fifth deuce.

"Hello," I squeeks, my knees like rubber.

Her voice is low and cultured—dusky, if you know what I mean.

"Hello," she says. "I'm Helen. You're Lefty Baker?"

I feel my knees weaken a little more and just nod my head without risking another squeek. I'm beginning to be conscious of the fact that the way they plaster down your hair it sticks out at the ends, and when they shave you you have too much powder on, and that I probably look the part of a nut the way I'm standing.

But Helen looks at me like maybe I am in a freshly pressed business suit and am a respected member of society. So a little starch comes back into my knees and I manage to stand on my feet and shake hands with her. Her hand is smooth and warm, and she holds mine with a little pressure, friendly like, and I feel my knees go soft again.

"I came to see you because I need your help—badly," Helen says in her dusky voice. The way she says it I'm ready to do anything for her. That is, until what she says next. She says, "I'm professor Hamfeather's niece."

"Oh no," I says, dropping her hand and backing up until I'm against the wall. "Uh uh."

SHE FOLLOWS me, a pleading look on her face. When my shoulder blades back against the wall she places her hands on my shoulders and blinks her long dark lashes.

"It's about James," she says, her lip trembling. And her perfume is like digging among the flowers early in the morning when the garden is still damp with dew.

"Whu—what a-b-b-bout James?" I stutter, beginning to realize that I was losing the battle.

"He needs human companionship," Helen said. "That's all that's wrong with him, really. If he could only find a friend, a REAL friend, his psychosis would leave him."

B-b-b-but whu-what a-b-b-bout m-m-mine?" I object, my teeth chipping against one another. My shoulder blades poke holes in the plaster and Helen's hands settle with a warm, dilirious pressure, more firmly on my shoulders.

"It will help you, Lefty," she says, and the way she says, "Lefty," gives the name perfume and lipstick and wine and song. "Don't you know that you can't lick a psychosis by running away from it? You have to face it—fight it."

"Yeah, sure," I says weakly. "Only it faces and fights right back—and always wins."

"But you'll win out eventually," Helen says, her face so close to mine all I can see is the rich redness of her lips, and her eyes are a far away blue sky seen through windows in a

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

church.

The next thing I know I'm standing back, my blood turned to high pressure in my veins, my lips feeling full of novocain—and Helen is standing there sort of wilted, with a dazed look about her like someone who's just downed their first AWOL cocktail—arsenic with old lace—half gin, half rye, with a squirt.

She leaves right after that, shaking my hand sort of clumsy and embarrassed and intimate, and although I can't remember having said I would be a REAL friend to James, the insane robot, I know doggone well that I would be a pal of Stalin now if Helen asked it.

THE NEXT three days of sitting and staring into space are like a ten minute ride on a cloud. Then the next morning I'm hustled out with the yard workers to the restaurant for a real breakfast instead of the cold stuff served on the ward. And after awhile I'm in the same flower bed I was before.

The non-existent weeds are still not there, and I settle down to a long morning of not pulling them while I look from a distance like I am.

A red geranium with a dusky perfume brushes against my cheek and leaves a cool wetness from dewdrops, and I sink down on one elbow in the rich black loam and shed a few salty dewdrops right back at it.

It's sort of fun to dig your fingers in the rich, moist dirt around flowers when you know you're stuck with it and there's nothing else to do. You get resigned to it, then you get so you like it.

After awhile a figure comes across the lawn toward the bed where I'm working. It's the insane robot. I get a violent chill at the thought of what he might spring on me next. But I just go on digging my fingers into the dirt and pretend I don't see him coming.

He comes up and stands there without saying anything. I go on working, humming a tune to myself, pretending I'm lost in my thoughts—which I am, I guess, because I'm practically transfixed by them and they're all about that robot standing there.

Finally I begin to feel ashamed of myself, letting that robot stand there all alone with his psychosis—ignored. I get so I can't stand it any more, so I look up, natural like, and pretend to just see him.

"Oh, hello there, James," I say. "How are you? I didn't hear you come up."

"Hello, Lefty," he says.

"Want to join me?" I invite.

"I'd like that," he says, and comes into the flower bed and gets down on his hands and knees and starts weeding along with me. But I can see out of the corner of my eye that he has something on whatever professor Hamfeather stuck in his insides for a mind.

He weeds along, silent, glancing at me covertly every once in a while; and I weed along, waiting for the lightning to strike where it may, knowing that where it may is me. Finally he says, like a guy talking about the weather:

"Did you know, Lefty, that nearly all the doctors running this hospital are insane too?"

I sink down on my elbows in a dead faint. Escaping with doc Winters was one thing. Going along with a robot who was cooking up some scheme to cure the doctors in the nut house of being nuts themselves was something else again.

I'd learned enough about science in the hospital library to know that you have to have basic premises, and in a nut house there are two basic premises—all the patients are nuts, and all the doctors are sane. But I remember Helen, and with a supreme effort I rise to my hands again and cautiously say:

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

"Yeah?"

"Yes," James says firmly. "I've been observing them the past week while you remained indoors. Quite interesting."

"No doubt," I remark, trying to keep my voice from breaking.

JAMES IS silent for awhile, working the soil around the geraniums with me. But I can feel the momentum of the flywheels in his brain as they go round and round like they do on a steam roller, and I feel like I'm staked out in front a steam roller with it coming toward me, inch by inexorable inch.

"It's a pity in a way," he finally starts up again. "I'm sure they could do a much better job of curing the inmates if they cured themselves first—or became inmates and let a few really sane people take over."

"What leads you to the conclusion that the doctors are nuts?" I ask, trying to steer the subject away from where I know it will wind up anyway, no matter what I do to escape it.

"Several things, Lefty," he says slowly like he's thinking. "For one, I believe there must be something fundamentally wrong with a doctor in the first place before he will come to a place like this to earn his living. The normal desire of a human being is to seek a healthy atmosphere, pleasant business contact. To deliberately choose to devote oneself exclusively to the abnormal indicates a basic morbidness that is itself a psychosis."

"Sure. Sure," I agree. "But—" I think I see something to knock his argument into a cocked hat— "By the same token you couldn't get a normal doc to come to this place, so if you locked up the docs and got some more you'd still be in the same fix!"

"That's a good point, well put," James says quietly.

I sigh with relief, foolishly thinking for a fraction of a second that that was that.

"But," the insane robot goes on. "I'd already thought of that and have the answer to it."

I start to tremble again, but a gentle breeze comes into the flower bed and I get a whiff of geranium and fresh earth, and a vision of Helen bolsters me up.

"What," he asks suddenly. "Is the only type of perfectly sane person that would come here?"

"Why—I don't know," I hedge.

"Perfectly obvious," James says. "The only perfectly sane type that will come here is the ones that are considered insane and are sent here. Right?"

"Right!" I agree quickly—too quickly.

"Take you, for example," James goes on in a tender tone. "Perfectly sane, but the doctors don't realize it."

"How did you guess?" I ask, not sure whether he was pulling my leg or not.

"It's obvious," he said firmly. "Your reactions are all normal."

"Oh, you've seen Helen lately?" I asks.

"Huh?" he asks blankly. "What I mean, your reactions to things in general—like your bumping into Dr. Walters and not stopping to apologize. That's perfectly normal. If everyone that did that were locked up who would there be to cure them?"

"You're a hundred percent right," I says emphatically. "But the docs—if you so much as crack a smile without being able to convince them there was something to smile about they write it down and stick it in your file and shake their heads over it."

"Exactly," James says. "And that's a psychosis far worse than any the worst mental patient in the whole place has. It's what I have termed the Insanity Fixation."

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Well, right away I like that expression. That's exactly what the docs have—an insanity fixation. I forget all about the danger of listening to the screwball robot and my tongue's hanging out ready for some more of the same.

I open my mouth to say something. He jerks his head around and says:

"That nut's loose again."

"Who?" I ask, jumping. "Where?"

I do a double take and give him the crescent wrench and stick my head in the geraniums. I feel that it's indecent to watch a robot expose his insides.

The power house whistle blows for lunch right then, and James, of course, doesn't eat, so I leave him after he gives me back my wrench, and go eat.

I DON'T see him again until nearly supper time. I've already weeded the flowers four times and am starting on the fifth when he comes walking across the lawn.

I'm still hepped up about that insanity fixation stuff and want to learn more about it, but I'm afraid of what else might be cooking in that mind or whatever it is.

James talks about the weather and the international situation for awhile. We decide it might rain, and that world affairs are bad. And all the time I'm getting ready to say NO to whatever it is I see cooking in back of his plastic eyes.

But I'm so sure it will be something like planning a revolt of the patients and locking the doctors up that I'm caught napping when he does come out with his plan.

"I've been considering ways and means," he says finally, pursing his lips. "Basically, both doctors and patients are IN the hospital, which is all that really matters. In some ways you yourself would be more confined if you had to take over the doctors' desk jobs instead of being able to goldbrick out here in the fresh air all day."

"Oh, then you don't think we should lock the doctors up?" I ask, relieved.

"No—" James says. "It would be better to give them psychological treatment without their suspecting it—sort of keep it in the background like they do. What I want you to do is get a notebook and pencil at the store and keep a file on one of the doctors. That way we can go slow and study our results. But you'll have to see the doctor every day and find out how he is, and keep track of his answers, and write down what you think about his reactions."

"That's just what he does with me!" I exclaim.

"Exactly," James says. "We must adopt the same methods the doctor uses, and get our licks in the same way he does—by psychology."

"That's just what I think," I agree. "That's a lot better than doing something drastic."

I see now how I can do what Helen wants me to do—be friends with James and help him get over being abnormal, and at the same time stay out of trouble.

"You'll have to be careful, Lefty," he warns. "We don't want the doctor to suspect a thing."

"You're d—you're exactly right," I says. And the quitting whistle blows just then. I walk fast and get to the store and buy the notebook and pencil from the credits I've built up by working in the flower beds. I get a notebook that just fits into my hip pocket.

Doc Walters comes into the store just then. I shove the notebook and pencil into my pocket and give the doc a professional smile to set him at ease.

"How are you feeling this evening,

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

doc?" I ask in a tone that hints I will gladly listen to his troubles if he has any.

"Just fine, Lefty," he says, looking puzzled. "And how are you?"

"The same," I says. "Anything bothering you lately? We're here together, you know. Anything I can do to help you, I'll be very glad to."

"That's very nice of you, Lefty," he says. "How would you like to have a cup of coffee with me? You have half an hour yet before the supper deadline."

This looks to me like he's getting ready to discuss his troubles with me, so I says:

"I'd be delighted. But I want this to be on me, doc. Next time it can be on your treat. O.K.?"

"If you want it that way, of course," doc Walters says.

WE GO BACK and sit in a booth, and I'm sure then that he has something on his mind, because otherwise he'd want to sit at the counter.

The waitress brings us our coffee.

"Anything else you want, doc?" I ask. "I've got more credit saved up than I can use, and I would be very happy if you would like a sandwich or a piece of pie or something."

"If you say so, Lefty," the doc says. "A piece of cherry pie, young lady." When she brings it and leaves he asks, "How do you manage to have credits to spare, Lefty. You smoke and like an extra cup of coffee occasionally. That should use them up."

"Mind wanders," I say to myself, diagnosing him.

"What did you say, Lefty?" he asks.

"Huh?" I hedge. "Oh, just muttering to myself. The truth of the matter is, doc, that I'm very careful with my credits. I don't use them unless I have to."

"I see," he says, and I feel I'd better steer the conversation to safer channels, so I get back to the main subject.

"I've been noticing lately, doc," I says, sipping my coffee and studying him over the brim of the cup. "That something seems to be bothering you. Perhaps if you told me about it I could help you. Or maybe it would help just to tell me about it. We're here together, you know, and although you're the doc and I'm the patient—ha ha—well, you can never tell."

A puzzled look gets in his eyes again, but lurking in back I see something that tells me I hit the nail on the head. I hadn't really noticed anything. As a matter of fact I steered clear of the docs except when they got me in a corner. It was a cinch, though, that something had been bothering him.

"Perhaps you're right, Lefty," he says with a short laugh. "I suppose we all have our troubles, including me. But I doubt if you could help me."

"You never can tell 'till you try me, doc," I says cheerily.

"That may be true," he says. "Tell you what I'll do, Lefty. I'll think about it. O.K.?"

"You do that, doc," I says, glancing at the wall clock over the cash register. "Suppose you see me tomorrow. I'll be out in the geranium beds all day. If you don't show up I'll meet you here, same time or a little earlier."

I'M BUSY all that evening writing down everything the doc said and my opinions about his reactions. It fills three pages of my notebook. I don't get it all down and revised as my memory brings back everything until just a few minutes before lights

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

out. My room mate, Cleve Horntuttle has his nose in one of them mimeographed things, chuckling to himself every couple of minutes, and I could have been sawing the bars off the window and he wouldn't of noticed it.

I stick the notebook and pencil in the pocket of my overalls just before the night nurse sticks his nose in the door and looks like he wished we were doing something so he could get tough.

I flash him my professional smile, speculating on whether I can do him any good after I cure the doc. He looks surprised and smiles—the first time I ever seen him do it.

The next morning I can hardly wait until breakfast is over and I'm out digging among the flowers again. The morning's half over when James shows up. I'm just about to take out the notebook when a couple of full bosomed dames come around the corner of the shrubery.

"Oh!" the one in the lead shrieks. She backs up in a hurry, pushing the other dame with her. "What a narrow escape!" one of them says from behind the bushes as they go along the path there. "There were TWO of them. My goodness. They might have been PSYCHOPATHIC!"

James lifts an artificial eyebrow at me, feels in his pocket, and, with a murmured, "Be back in a little while," he hastens around to head them off.

"Pardon me, madams," I hear him say. I hear them gasp. Then he says, "Do one of you happen to have a drinking cup on you?"

"Why yes," one of them says nervously. "I have a folding cup in my purse. Never without it, you know." She titters hysterically.

"Fine," James says in his most cultured tone. "There's a faucet over there across the lawn..."

He's back in ten minutes. It's quite a nice looking collapsible cup.

"They didn't wait for it," he says with a shrug. "Oh, well," sticking it in his pocket. "It will come in handy. Now let's see what you have in your notebook, Lefty."

He studies what I've written, nodding his head now and then and saying, "Mm hmm." Finally he hands it back.

"That's very good, Lefty," he says. "Your conclusions seem to be quite sound, too. 'Mind wanders'. Symptomatic in the extreme. 'Evasive'. Indicates that the problem on his mind is near the stage of psychosis. I quite agree with you."

He gets down on his hands and knees and starts weeding. I'm about to put the notebook back in my pocket when he says:

"Keep it out, Lefty. I can think better if I'm working, and I want you to jot down what I think. Use the next clean page and write at the top, 'Prognosis'."

So I write at the top of the next clean page, 'Prognosis'. Then I sit there with the pencil and notebook ready.

"Probably increased tension and emotional stress," James says suddenly. "Which might possibly be relieved by psychoanalysis, though such treatment must be disguised so as not to alarm the patient."

I write it down as fast as I can and manage to get it all. James goes on digging around the geraniums and thinking.

"Failure to check course of psychosis may result in transfer of psychopathic trends to professional attitude," he says. And I write that down too.

Then I happen to glance toward the main building and I see doc Walters headed in my direction.

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

"Here comes the doc!" I warn James.

HE TAKES one look and scoots around the bushes, not going fast enough to make it look suspicious. I stick the notebook back in my pocket and start weeding industriously. When the doc comes up I pretend to be very surprised to see him.

"Why hello, doc!" I says, standing up and wiping my hand on my overalls. We shake hands as I step out of the flower bed onto the grass beside him.

"Who was your friend?" doc Walters asks casually. "I couldn't recognize him from a distance."

"What friend?" I asks. "Oh! You mean that guy that was here. He's just a guy with a loose nut. He comes around to get it tightened up now and then—ha ha."

"Ha, ha," the doc echoes. "Let's take a walk over to the new building they're putting up, Lefty."

"Sure, doc," I says soothingly. We start out, taking our time. Finally I ask, "What's on your mind, doc?"

"Oh, nothing much," he hedges, but I can see he's got to talk, so I don't say anything more—just walk along and keep my mouth shut. "You've changed a lot lately, Lefty," he finally says. "At this rate you'll be leaving us pretty soon."

Now I know he's got something terrific on his mind. I know the last thing he would ever do to me is turn me loose. But the first rule in dealing with nuts is to humor them and try to coax them out of it rather than argue them out of it so I say:

"I'm very glad to hear that, doc. In many ways I would hate to leave here—especially now that I'm needed." I say this last sort of slyly, hoping he'll take the hint and give me something to put down in my notebook file on him.

"I'm glad you're taking an interest in the other patients, Lefty," the doc says.

"Huh?" I grunt. I was so sure he was on the point of telling me his troubles that his remark didn't connect.

"That friend of yours that was just here," he says, smiling.

"Oh, yeah. Yeah sure," I says. "Now about this trouble of yours, doc—"

"It's a very healthy sign when you start looking around at other people," he interrupts.

"Yeah, I know," I say impatiently. "About what's troubling you, doc—"

"There's one thing that's troubling me, Lefty," he says.

"Yeah?" I says in a confidential tone, feeling that at last it comes out and the doc gets rid of his psychosis. "Tell me!"

"Before we can release you," he goes on. "There has to be a job for you to go to, and someone to be your guardian and be responsible for you."

This completely derails me. I wasn't expecting it. I give a bitter laugh, inside so the doc won't take away my ground freedom for laughing without something to laugh about. All these months I've been chewing my fingernails down to the elbow waiting for this—and now I don't want it.

But can I tell him the reasons? Hah!

THEN ALL of a sudden I realize what's behind it all. Subconsciously the doc knows he's got a psychosis, and like all patients he wants to get away from the doctor—meaning me. The only way he can do it is kick me out. Get it? So right away he starts ignoring the things that prove I'm crazy and concentrating on the things that prove I'm sane—which I am all along anyway.

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

I nod to myself, knowingly, and decide to pretend to play along with him.

"I hadn't thought about it, doc," I says, sounding co-operative. "Unfortunately there isn't anyone I know who would do that. And I haven't any job to go to when I get out."

"That's what I thought," he says quickly. "If I were able to find someone who would be responsible for you and give you employment, would that be O.K. with you, Lefty? It would only have to be for six months until your parole expired. After that you could go where you please."

"That would be fine, doc. Fine," I says, knowing that people who will take a guy fresh out of the nut house are as common as Alaska grapefruit. Then I sigh, relieved like, making like that subject is well taken care of, and try to switch back to the original subject. "About what's troubling you, doc,—"

"That's fine, Lefty," he cuts in. "I'd hoped you'd be willing to trust my judgment in this. I have someone in mind that I think will take you when you're released. Now I'll find out for sure, and if he will you can expect to leave the hospital very shortly. I have to get back to the office now." He glances at his watch. "Almost time for you to eat already."

He smiles and gives me a nod and goes toward the main building, leaving me with my mouth still hanging open on what I was going to say when he interrupted me.

I sit down on the nearest bench and start writing in my file on the doc. I fill four more pages before the lunch whistle blows. In the afternoon I write some more, and also start filling in the prognosis which is now really going places.

IT'S TWO days before I see James, the robot, again. Meanwhile in the last half of my notebook I've started a file on a couple of the ward nurses, engaging them in conversation and trying to draw them out. I keep my mouth shut and let them do the talking, just saying enough myself to keep them going.

One of them's married and having trouble with his mother in law. The other's single and having trouble with his girl friend.

So when James shows up we have a lot to work on. I give him my notebook and he spends almost an hour studying it while I go on digging among the flowers. Finally he hands the notebook back to me and says:

"You know, Lefty, he's likely to pull a few strings and get you out of here at that. It's too bad we didn't get to him sooner. The subconscious workings of his mind are fairly obvious. All his subconscious desires are transformed into the framework of hospital procedure."

"Yeah," I says. "What are we gonna do?"

"That comes under the classification of treatment," James, the robot, says. "Say! I think I have it! With most men the trouble is women. I'm a robot, thank professor Hamfeather, so they mean nothing to me; but the root of Dr. Walters' psychosis is probably a woman."

He jerks his head in the direction of the main building suddenly and says, "That nut's loose again." This time I'm not fooled. I reach in my pocket and hand him the crescent wrench.

I have my head in the flowers, pulling up imaginary weeds. All of a sudden there's a shriek followed by a heavy plop.

"It's all right, ladies," I hear James say. "I just have a loose nut."

I look up in time to see the second one crumple. It's the two dames James got the collapsible drinking

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

cup from. They're out cold. And no wonder. James snaps the skin of his neck back in place, covering up the gleaming metal bones and red rubber muscles and hands me back my wrench.

"I think we'd better weed some flower bed on the other side of the main building," James says thoughtfully.

"Me too," I says. We start walking, getting as many shrubs between us and the sleeping females as we can right away in case they come to unexpectedly.

"Now what I think should be done," James says when we begin to feel safe. "Is for you to lead Dr. Walters out by making up a fictitious tale about a girl friend, and maybe that will get him started talking about his."

"Sure enough," I says, glancing at him slyly. "Perhaps you would be surprised to learn that I won't have to make it up."

"Is she a patient?" James asks.

"PATIENT?" I echo. "No. She has gleaming golden hair with waves in it that cascade like a golden waterfall. Her chin was molded by the gods. Her teeth are priceless pearls gathered from the depths of the ocean by south sea islanders while their girls stood on the sandy beach and sang songs of love that were picked up by the warm tropical breeze and carried out to sea for the divers to hear as they came to the surface from the coral depths. Her eyes —well, her eyes are breaks in the ethereal loveliness of her face, like two clear spots in white spring clouds drifting in the sky, where you can look out into the blue sky and see the pearly gates with angels flying around, and Saint Peter twirling the key to Heaven about his finger."

"That's enough," James says sharply. "After all, I'm just a robot and have no interest in such trivia. By the way, where did you manage to pick up a description like that?"

"In one of those mimeographed things Cleve Horntuttle, my room mate gets," I answer. "But what difference does that make? I memorized it because it fits her right down to a gnat's eyelash."

"O.K., O.K.," James says. "But save it for Dr. Walters. If it doesn't bring out the cause of his psychosis nothing will. And if you can bring that out he won't want to kick you out any more."

"O.K.," I says, but I smile to myself, because I can see James is more affected than he wants to let on. We're passing the store. "I think I'll get another pack of cigarets while I'm this close," I says.

"Go ahead," James answers. "Anyway, I think I'll go down by the power plant for the rest of the day. I'm working on something to increase its efficiency."

He goes on past the store and I go up to the door to go in. All of a sudden I stop cold. Through the glass I see Helen in there, and she's with doc Walters. The way they laugh and look at each other—something goes out of me.

Somebody pushes me gently aside and murmurs, "Pardon me," as they go in. Instead of going in, I turn away and go out to the flower beds along the side of one of the back ward buildings. I generally steer clear of this part of the grounds because there's people inside, screaming or moaning, or maybe several of both, and they go by you mumbling to themselves like they were two people.

But now I don't care. I see it all now. I'd wondered how Helen had gotten in to see me. Now I know it's because doc Walters gave her a pass and told her where I was. She was

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

in love with him.

I thought of when she had come to see me, and we'd been standing there, so close, and all of a sudden she was stepping back with her hair mussed, and the taste of her lipstick was making me think I'd been in Heaven.

Well—instead of pulling imaginary weeds in the geraniums I guess I did a sprinkling job for a while.

IN THE morning when I wake up Cleve Horntuttle is gone. I wonder why they didn't wake me too. I climb out of bed and start putting on my overalls when the day nurse comes in and says:

"Take those things off. You go before Staff this morning."

"Huh?" I says. "Staff?"

"Sure," he says, a big smile on his face. "And you haven't got a thing to worry about. Dr. Walters has got it all fixed up. Just don't give them any funny answers, and forget all about the queer ideas you used to have, and you'll come through with flying colors."

I dress slow, trying to think things out. The whole thing's soured on me now. I decide the best thing I can do is let them kick me out and go to work for some guy for six months or so to get a stake, and then go back to my old haunts in the State Street card rooms. Maybe my old pal, Pokey, will still be around.

I get to thinking of the good old days before we met that batchelor in the beer parlor that had the exteroceptor deceptor. We'd been boosters, shills, sitting in poker games with house chips when the number of live players dropped down.

"Ah," I sigh as I finish lacing my shoes. "Them was the good old days."

When I go out by the desk and sit down, waiting for time for breakfast on the ward with its cold coffee and lukewarm food, I think how nice it would be if I could take James along with me.

I chuckle to myself at the vision of him explaining about dehydrated water to Pokey—then catch myself and stop chuckling, looking around guiltily to be sure nobody's seen me. It's about as bad to chuckle at your thoughts in the nut factory as it is to sneeze in a nitroglycerin storehouse. Nobody asks you what the joke is, and maybe you wouldn't dare tell them if they did—like this one.

During breakfast they're all excited at me going to staff. It's easy to play along and act like nothing's wrong with me.

After that I just walk around with my hands in my pockets waiting until nine o'clock when staff begins. Then I go over to the main building and report at the desk and a nurse takes me to the waiting room.

It's the only time I've been in there. I'm the first one to get there. I sit down and try to read a magazine. All I do is stare at the pages, so I get up and go over and look out the window.

The window looks out on the restaurant building where the employees and yard workers, including patients with ground parole, eat their meals. Over to one side and just beyond it is one of the back wards for women. They stick the violent cases in there, and some of them never get out again. Most of them do, though, because it's a modern squirrel warehouse that prides itself on its turnover.

While I'm looking a crowd of women come into sight along the sidewalk from the women's ward in the main building. Most of them are nurses—the huskiest females they've got. They keep them in the back wards where it takes muscle sometimes.

These nurses are surrounding a couple of women who seem to be objecting very strenuously. I see that

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

they're wearing straightjackets before I get a good look at their faces. When I see their faces I whistle in surprise. It's the two dames we left in a dead faint out on the lawn by the geranium bed. They'd evidently tried to tell the doctors what they'd seen—the poor saps. I could just picture it.

Cheered up a bit by this incident I was in a pretty fair mood when the face of an undertaker poked through a crack in the staff room door and called my name.

I COULD see right away that it wasn't a sanity hearing but just a farewell look see, so far as the docs were concerned. They all smiled at me and took a good look so they'd recognize me on the street. Doc Walters was master of ceremonies and acted like he had pulled me up from the depths of insanity by sheer genius alone. In less than five minutes it was over.

"Now I'll take you out and introduce you to your guardian, Lefty," he says, putting an arm on my shoulders like we're old pals—and in a way I suppose we are, even if the girl I love is going to be his wife instead of mine.

"O.K.," I says, falling in step beside him. For some odd reason I think of that time the first time I saw him when I felt like sticking my thumbs in my ears and saying, "Woo woo, I'm a sack of potatoes," and he had guessed what I was thinking and had startled me by saying, "So you're a sack of potatoes."

I blink my eyes to keep back the tears, and I know I'm going to miss the whole shootin' match, right down to the looneys that run fifty yard races with themselves and argue politics with themselves and have a great time all alone while they wander all over the place telling themselves jokes they've never heard before—from the way they chuckle over them.

But we're out in the reception room now and I bring my thoughts down to earth and start looking around. The doc takes me over to a waiting room to the right of the main entrance. There's a nice old couple there, sitting quietly, and I guess they're the parents of the nice kid from ward A that was going into staff right after me. I feel sorry for them right away, because they look so fine, and I know the kid won't make it.

Standing, and rocking slowly back and forth on their heels are a couple of guys that have police badges inside their eyes, and I know they're here to take Bugs Bufoni back to the state pen if he passes. There's other people waiting, too. But the doc is leading me across the floor too fast for me to see them all.

He stops in front of a skeleton covered with a pleasing looking skin. The guy is maybe sixty. His forehead is higher than the Empire State building. A couple of pale eyes with a faded twinkle of friendliness look out at me from under the forehead.

The old codger rises as we stop in front of him. His smile uncovers a nice set of store teeth. He sticks out a boney set of fingers and I take them automatically.

"This is to be your guardian, Lefty," doc Walters says heartily. "You'll enjoy working with him and probably want to stay on with him after the six months probation are up. This is Professor Hamfeather, Lefty."

"P-p-p-professor H-h-h-hamfeather?" I stutters. "Oh NO!" But I know I'm sunk. It's this—or back in the ward again. At least it'll be a nice vacation while it lasts. So I plaster a pleased smile on my face and do a double take and say, "This is certainly an unexpected pleasure, professor. I've heard a great deal

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

about your work."

He bobs his topheavy head and is very pleased at my remark.

"Well, Lefty," doc Walters says. "I have to get back to staff. You run along. And take care of yourself, fella." He pokes me affectionately. "Oh yes," he adds as he turns away. "Your things will be sent to my office and I'll have them sent to Professor Hamfeather's residence."

He's out the door before he can see the look of dawning horror on my face. I've just remembered the notebook!

"The notebook!" I yells. "Wait right here, professor. I'll be right back."

I start toward the front entrance in a sprint, then suddenly I'm brought up short. There she is, coming in the entrance. Her eyes light up as she sees me and before I can think she's in my arms. A minute later I think of doc Walters and her, and start to draw back to ask her about it, but she rubs her cheek against mine and breathes, "Oh, darling!" And so I think, "To heck with the doc."

Professor Hamfeather coughs discretely behind me. I look up and see an awful lot of grinning faces, and I guess Helen does too, because we break and she looks as embarrassed as I feel.

We go outside and cross the pavement to the parked cars. There's a big limousine as long as a bus. Helen opens the back door and pushes me in. She climbs in after me. The professor gets in front beside the chauffeur and slams the door. Then he says, "Home, James."

"Yes, sir," a familiar voice says respectfully.

I jump up and lean over the front seat to take a good look.

"Why James!" I says. "You old son of a gun you!"

IT WAS A week later that we all went into town. The professor dropped off at a scientific supply house and told us to be back in about three hours. We dropped Helen off at the beauty parlor and she told us to be back in two hours or so.

"Where to?" James asks me with a contented smile. I thinks a minute, then snaps my fingers. "Down to State Street," I says.

I tell him to pull up half a block off State. We get out and mosey down to where I used to hang out. I smell the old smells, feel the vibrations of traffic, see the people around me, and in its own way it's as wonderful as the smell of fresh earth and geraniums.

We come to Oscar's Bar and I peek in the window. Sure enough, there's my old pal, Pokey, sitting by himself and looking the same as ever.

I give James a knowing look and a nod and we go in. Oscar looks at us with blank eyes and I know he's forgotten me. I motion James to sit down next to Pokey, and I sit down next to him.

James gets a few ideas of his own. When he sits down he staggers against Pokey like a drunk and mouths a "Pardon me, sir." He orders a bottle of beer the same way, although he can't drink it, being a robot.

Pokey gives him a couple of disgusted looks, and then spies me.

"Well look who's come to town!" he says.

We lean across James and shake hands, accidentally knocking James' beer over.

"I'm sorry," Pokey says. "Here, let me buy you another."

"Squite aw right," James says. He fixes a cold eye on Pokey appraisingly, while I grin behind my hand. Then he says, "You look like an intelligent and educated man, mister, ah—"

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

"Just call me Pokey," Pokey says.

"Aw right, Pokey," James says. "Now as I was saying before you interrupted me—"

I slip out and go look in Eli's Pawn Shop window for awhile and see old Eli inside behind the heavy grill at the back, reading his newspaper through steel framed glasses perched on the end of his nose. After that I go down to Whitey's card room. It's too early for anything to be going, though. But I walk in and walk around, seeing the empty, cloth covered tables, smelling the mop water and stale wet tobacco smell.

Then I go back to the car and wait.

A little while later James comes strolling down the street. He climbs behind the wheel with a thoughtful look on his face and sits there like he's trying to figure something out.

I don't pay much attention. I'm thinking about Helen. But I pay attention pretty fast when he pulls out a roll of bills and starts dividing them up with me.

"What's this?" I ask, startled.

"You know what, Lefty?" James says. "I think your friend Pokey is crazy. He made me sell him that whole bottle of dehydrated water. All ten thousand gallons of it!"

REFLECTIONS . . .

★ By W. R. CHASE ★

IT IS INTERESTING occassionally to go back a few years or a few decades and to examine the books and magazines of the times to see what they had to see on future predictions. When one does this in the world of science-fiction, one can find practically an exact prediction of what today has come about. Atomic energy for example was a commonplace discussion of the s-f magazines of the Thirties.

Occasionally a scientific textbook or magazine of the Thirties would make a rather cautious statement about atomic energy predicting it to come in the remote future. That was at least a concession—the majority of people of the time didn't even know what atomic energy was much less being capable of predicting its invention.

In examining an old pile of books, we ran across one called *Experiments in Atomic Science for the Amateur*, by James L. Clifford, published in nineteen thirty! This remarkable little book had an introduction in which Clifford discussed the role of amateurs in science and suggested that more should get interested in atomic physics. He said that certain basic simple experiments could be performed by the amateur with a minimum of equipment and that he shouldn't be frightened by the complexities of the theory.

We'd like to quote from this introduction: (remember this was written in nineteen thirty not by a s-f fan) "The World is just on the brink of the greatest discoveries of all time in science. Transmutation of the elements now appears only a matter of time, and the practical utilization of intra-atomic energy seems remotely possible. With these ends in view, what a wonderful field for experiment and study!...."

And then the book proper goes into the study of uranium with the aid of a spintariscope, photographic paper etc. The building of a simple Wilson cloud chamber is described and atomic particles are examined. The gold leaf electroscope is also described and the process of ionization is clearly explained.

The point we are trying to make is the amazing clarity and foresightedness of this man. How successful he was in suggesting amateur atomics we don't know, but it is possible that some of the men now in the field, may have been influenced by the little work. Your editors have planned playing with a Wilson cloud chamber, that versatile tool of the physicist which permits the tracking down of minute atomic particles.

Because it is so simple, consisting of merely an expansion chamber filled with water vapor, it can be easily constructed. Clifford knew what he was doing. Amateur scientists will some day have a field day with experimenting if they take the trouble to examine some of the relatively simple processes. Who knows—maybe some enterprising amateur will perform Millikan's oil drop experiment with home-made equipment. It is, after all, quite simple in principle!

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

HOMEOPATHIC MAGIC

★ By SANDY MILLER ★

ONE OF THE many uses of homeopathic magic was to heal or prevent sickness. The ancient Hindoos had an interesting ceremony in connection with the cure of jaundice. The whole idea was to banish the yellow color from the patient to some naturally yellow creature or object. After that was accomplished, it was necessary to procure a healthy red color for the patient. This was usually taken from a red bull because of its virile, vigorous nature. With all this in mind, a priest would recite a spell "Up to the sun shall go your heartache and your jaundice; and in the color of the red bull do we envelope thee; etc." All the time the priest was reciting these words, he speeded the patient's recovery by giving him water to sip which was mixed with hair from a red bull. The patient was placed on the skin of a red bull with a piece of the skin tied to him. He was daubed all over with a sauce made of yellow tumeric, then placed back on the bed. Three yellow birds, a parrot, a thrush, and a yellow wagtail were tied to the foot of the bed with yellow strings. The priest then poured water over the patient, washing the yellow tumeric from him to the birds. As a final touch the priest wrapped some hairs from a red bull in a gold leaf and glued them to the patient's skin.

Some ancients believed that if a jaundiced person looked long at a stone-curlew, and if the bird looked steadily at him, he would be cured of the disease. It was thought that the bird had the power to draw out and receive the malady through his eyesight. The stone-curlew was highly prized, and anyone fortunate enough to own one kept it carefully concealed so that no jaundiced person could look at it and be cured for nothing. It was thought that the power and virtue of the bird lay not in its coloring but in its large golden eye which was able to draw out the yellow jaundice.

* * *

STF EXPANDS

★ By J. R. MARKS ★

THE HIGHLY specialized science fiction audience is becoming larger and larger. Public recognition of the value of science fiction, from a literary standpoint as well as an entertaining one, is being realized. Recently *Time* magazine published a review of a book and a dissertation on s-f. Previously the magazine had discussed the national s-f conventions.

Other national magazines outside the field of s-f have begun to run an occasional s-f story, realizing at last that there is a vast, intelligent audience extremely interested in this most interesting and newest form of fiction. And it is a source of great pride to realize that *Amazing Stories* was the pioneer in the field. Since way back in 1926, this magazine has been bringing out, with hardly an interruption, the finest science fiction published.

It is flattering to realize one is a science fiction addict, because the reviewers point out most clearly that the followers of the subject are usually far above average in intelligence and curiosity. Science fiction readers are the elite of the literary world; the step between the early novels of H.G. Wells and the conceptions of say—oh, Rog Phillips, for example, is one of degree merely, not kind. And what is more fascinating is the understanding that there are no ends or limits to the fantastic wanderings the human mind may take in its efforts to probe s-f!

BUILDING BLOCKS

★ By L. A. BURT ★

IF ANY particular group of people is capable of recognizing and appreciating modern architecture, it is the science-fictionist. The artwork in science fiction bears a strong relationship to the stories themselves. Very often an appropriate illustration can make a story by suggesting or setting the mood for that story. Consequently, the s-f fan is prepared when he sees the latest in modern functional building. Indeed, he has been prepared for the past twenty years, during which science fiction in the form of its illustrations has predicted almost exactly the nature of future and present architecture, and construction.

The modern use of straight lines and curves in building, clean and useful and functional, pleases everyone once they become used to what must seem slightly bizarre at first. In science fiction, the idea of usefulness and functionalism is an old story. Most s-f writers recognizing the weaknesses of gingerbread style, always wrote into their descriptions of the future lavish explanations of the sensible styles to be prevalent. And of course, the artist to illustrate the story usually gave free, but sound rein to his imagination.

The result was that if you look over s-f stories of the past, their illustrations of commonplace items, like homes, cars, cities etc., do not offend the eye, but rather fit in well with modern accepted conventions.

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

LUNAR HOLIDAY

By PETER WORTH

Larkin was tired of being chased all over the system — so he decided to take a rest — with the law!

THE TWO men who strolled along Grand Boulevard in the heart of Luna City drew many amused glances from passersby. Not even in the year 2092 did the inhabitants of the Moon's largest and most sophisticated metropolis cease to be entertained at sight of visiting quilipod planters. And the two men were very obviously just that. Their rough frontiersmen's garments and awed faces literally shrieked "hick."

Appearances can be deceiving, however. And so it is doubtful who were the most amused—Skye Larkin and Jupe Holt, or those individuals of Luna City who stared at them.

Skye Larkin chuckled—that rich bubbling chuckle so typical of him. "This, Jupe, is what I meant by my 'Purloined Letter' idea."

"I still don't get it , Chief," Jupe Holt protested.

Skye Larkin sighed. "Really, Jupe, there are times when I wish you had read the Classics. The explanation is

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

He turned away from the monstrous face on the screen as someone waved outside. . . .

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

simply that an object hidden in plain sight is least likely to be discovered."

"I get it now, Chief," Jupe Holt said. He grinned. "You mean the Interplanetary Rangers won't find us here in Luna City, because they don't expect us to be walking around, dressed as quili-pod planters."

"That's it exactly, Jupe." Skye Larkin glanced down at the clothing which covered his long, lean frame, and the laughter-lights twinkled brightly in his grey eyes. "If Porky Welton could only see me now!"

It is certain that Inspector Gregory Welton of the Interplanetary Rangers—dubbed "Porky" by the impish Skye Larkin—would have been very much interested. To the extent, no doubt, of using every means, fair or foul, of accomplishing Skye Larkin's capture. The enmity between the two men was not the ordinary one, based on the different aims and viewpoints of outlaw and lawman, but was a much more personal thing. It was a deadly, never-ending game of wits, which on Skye Larkin's side was played mischievously and gayly and on Inspector Gregory Welton's grimly and determinedly.

But for all the small-boy spontaneity with which Skye Larkin played the game, he did not commit the often fatal mistake of underestimating his opponent. He knew the rules and penalties, and he obeyed them well. Which explained why he was still at large in spite of the best Inspector Gregory Welton could do to prevent it. And which explained why Skye Larkin—whom men from Mercury to Saturn knew as Captain Skylark, or simply as the Skylark—had become something of a legend among lawful and lawless alike.

"My feet are killing me, Chief," Jupe Holt complained. "I'm not used to all this walking around. What do you say we do something else to pass the time?" Jupe's broad face, made pale by chemicals as the face of a quili-pod planter must be, was twisted in a grimace of anguish. Like his namesake, Jupiter, he was a veritable giant. Lank, blond hair topped off his six feet eight inches of height.

LARKIN GLANCED at his wrist chronometer. "It's still early in the afternoon. I don't think a reply will have come in yet to that televideo personal I placed, and the day is too good to waste, just sitting around the hotel. Tell you what, Jupe. The *skal* races are running at Craydon Park. How about a trip over there?"

"Swell. Anything—just so I can sit down for a while."

Larkin grinned. "There's an airtaxi stand a few yards away. Think you can make it that far?"

Jupe looked injured. "Of course," he grunted.

Larkin pressed the signal stud at the airtaxi stand, and then waited for some pilot to appear in response to the summons. Only dimly now was he aware of the curious stares of the people who passed along the boulevard. Mention of the televideo personal had recalled to mind the purpose which had brought him here to Luna City. And thinking of it, The Skylark became grim.

With eyes from which the laughter-lights had faded, Larkin looked along the great, gleaming span of Grand Boulevard, watching the constant stream of rainbow-hued runabouts flash past. On the east side of the span sprawled the great green and gold expanse of Finston Park, while on the west towered the spires of Luna City's downtown section. Soaring over the park or flitting among the multi-colored buildings of the city, were innumerable tiny airtaxis and private jet-planes. The whole was a living tapestry that glittered and

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

blazed with color, blared and beat with sound.

The illusion which Luna City gave of being an Earthly metropolis was spoiled if one looked too closely. For then could be seen the mighty transpolite shell which enclosed it. The "Dome" as the shell was called, made life possible on the barren, airless surface of the Moon. It held in the atmosphere of the city, and at the same time shut out the deadly radiations and heat of the sun. Entrance and egress were accomplished by a system of great air valves at each of the compass points of the dome. The shell was polarized at regular intervals, and the resultant shutting off of the Sun's rays in their entirety, gave Luna City periods of night and day. Gravity plates, set beneath the city floor and activated constantly by atomic generators, gave a gravitational attraction equal to that of Earth.

Larkin chewed thoughtfully at the plastic stem of his glassite quili pipe—it was an accessory to his costume of rain helmet, hip-high plastolex boots, and bright synthe-wool jacket, properly blackened as the pipe of a genuine quili-pod planter must be—and his grey eyes, even more sober now, followed the great curve of the dome. He knew only too well that the great transpolite shell constituted a perfect trap. Should the air valves be closed by police order, there would be no means of escape from the city. Apprehension, then, under the appallingly thorough fine-combing methods of the Interplanetary Rangers, would be only a matter of time.

But Larkin shrugged; his irrepressible nature would not allow him long to be concerned with thoughts of disaster. To him, this visit to Luna City had the glamor of a holiday excursion, and he did not intend that it should be marred by tension and worry. Of course, there was that nasty *vango* business to take care of, but that wasn't the only important thing in the world. Business and pleasure were synonymous with Larkin; he seldom indulged in one without at the same time including the other.

An abrupt, droning sound reached the Skylark's ears; he looked up to see an airtaxi come settling down to the span. He and Jupe climbed in.

"Craydon Park," Larkin told the pilot.

THE AIRTAXI lifted into the heights. Luna City dwindled in size beneath them, became a flat canvas with vivid splotches of color arranged in geometric patterns.

The tiny televideo receiver inside the cab had gone on automatically at their entrance. A newscaster was reporting on the Spotted Sickness, a strange malady, hitherto unknown, which had swept Earth and Mars.

"...under control on Earth through rigid quarantining. The disease is now sweeping through the Martian cities of Thoron and Larango. Scientists have determined its cause to be that of a mutant virus, though no effective means of combatting it has yet been devised. Spotted Sickness is now known to cause death in only a small number of cases. Its main peculiarity seems to be that of leaving the victim permanently marked with red spots on face and hands—"

Jupe wasn't listening to the televideo. His rugged features were twisted into a grimace of worry.

"Wonder what Fussy and Dino are doing," he muttered.

"Quarreling, no doubt," Larkin responded, with an abrupt grin.

Fuzzy and Dino were the remaining two of the group which comprised the Skylark Quartet. Fuzzy was Koltar Ongh, a monkey-like, extreme-

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

ly hairy, little Martian of caustic disposition. Dino—short for "Dinosaur," a spiteful appellation hung upon him by Fuzzy—was Tolog Sath, a scaly, seven-foot Venusian reptile-man. Dino was ordinarily amiable and placid, but in moments of stress he could become as cold and deadly as a cobra.

"Hope those two don't get into trouble," Jupe growled. "It'd be the end of us, if we were discovered here in Luna City."

"I gave them strict orders to stay at the hotel," Larkin said. "They've had enough of Luna City by now, and I'm sure they'll do just that. Besides, we can expect a reply soon to that televideo personal. Fuzzy and Dino are just as anxious to get this *vango* business finished as we are, and they won't want to miss a reply if one comes in."

There was a sudden whirl of color on the screen of the televideo receiver. The excited face of a second newscaster appeared.

"Special flash, folks! Interplanetary Ranger police, by tracing certain credit-pieces just placed in circulation here, have decided that the famous outlaw, Skye Larkin, must be present in Luna City! All air valves have been closed until further notice. No ships will be allowed to enter or leave Luna City without permission from Commissioner Allenby. Inspector Gregory Welton is rushing here to take charge of—."

Again a whirl of color on the screen; the face of the newscaster abruptly vanished. A canned color music program took his place.

Skye Larkin laughed softly. "The way that newscast was cut off, it wasn't supposed to have gone through. Allenby and Welton were counting on taking us by surprise—but that's spoiled now."

"Hold your hats, boys," Jupe muttered bitterly. "Here we go again! Looks like the finish this time, Chief."

"Maybe," the Skylark said. His grey eyes glittered with wicked mirth. "Maybe, Jupe. Anyway, it looks like we're going to have some fun at last."

Grim fun, perhaps, but fun nevertheless to Larkin. On the one side was Welton and the implacable might of the Interplanetary Rangers. On the other was the *vango* organization which Larkin had sworn to break, men who would kill ruthlessly to keep their evil business intact. Both were warned. Both would be after him. The Skylark sat relaxed in his seat, while the nimble fingers of his mind began to weave.

Larkin and Jupe left the airtaxi at Craydon Park. They did not stay to see the *skal* races, however, but immediately hailed another. This time Larkin gave the pilot directions to take them to Lunar House, the hotel where the Skylark Quartet was staying.

The trip back to the city was made in silence. Jupe was tense, worried. Larkin's mind was still busy, the light in his eyes coming and going only at long intervals.

IT WAS NOW more than a month, Earth time, that one of the Skylark's innumerable friendly sources had sent him the tip that a shipment of *vango* was on its way to being smuggled into Luna City. *Vango*, brewed from a certain species of Ganymedian cave mushroom, was a narcotic more deadly and insidious than opium.

Larkin and his men had intercepted the shipment; the smugglers had lamentably perished in the brief though deadly fracas which had taken place. Then, with the cargo of *vango* in his possession, Larkin had come to Luna

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

City for the annual Reach Week celebration. His purpose was not so much to attend the festivities commemorating man's reaching of the Moon as it was to crush that unknown organization of men in Luna City so inhumanly heartless as to peddle *vango*.

Within the Skylark was an unquenchable flame of altruism; though pursued constantly by the Interplanetary Rangers as an outlaw, his activities were directed always toward the side of good. If he *did* possess himself of a few stray credits here and there, who was to blame him?

Thus Larkin's motives now were both altruistic and monetary. Not only did he intend to destroy the *vango* organization in Luna City, but he planned to make them pay for his trouble at the same time. The televideo personal which he had placed was his means of getting in contact with this organization. He had simply given the name of the destroyed smuggler spaceship and requested that anyone interested in its former cargo get in touch with the manager of Lunar House. The manager—who had been payed well for his services—was then to relay the response to Larkin or one of his men.

The airtaxi swooped to a stop before the ornate entrance of Lunar House. Jupe started to climb from the cab. Larkin grabbed his arm quickly.

"Wait, Jupe!"

"Huh? What's the matter, Chief?"

"Look at those men around the hotel," Larkin commanded.

Jupe looked. He slid back into his seat with a startled grunt. "Plainclothesmen! The Rangers have got the hotel watched, Chief."

"Right," Larkin said softly.

Jupe was tense. "Do you think they know we're there? Maybe they've caught Fuzzy and Dino."

"I don't think so," the Skylark replied. "Welton knows we'd have to stay at some hotel, and he's most likely having them all watched. As to Fuzzy and Dino, we'll have to find out. If they've been captured—"

The Skylark picked up the speaking tube and gave the pilot instructions to take them to the Emperor Theatre. He and Jupe entered a small bar and grill adjoining the great three-dimensional movie palace. In a televideo booth, Larkin donned the calling mask and signalled the room at Lunar House in which Fuzzy was staying. It was with immense relief that he saw the oval, balded head of the Martian materialize on the screen.

Fuzzy frowned suspiciously at the mask which Larkin was wearing. "Who's this calling?" he demanded.

"It's me, Fuzzy," and Larkin chuckled.

Fuzzy knew that chuckle. Instantly reassured, he became excited. "Chief—"

Larkin shook his head quickly. "Save it. I'm at the Satellite Rest in the Emperor Theatre building. Come here at once, and pass the word to Dino. Don't leave the hotel together; the place is watched."

LARKIN left the booth and joined Jupe who was waving at him. Ten minutes later, Fuzzy entered the place and stood looking about anxiously. Larkin signalled the little Martian to where he was sitting.

"Chief—a guy came in answer to that televideo personal you placed!" Fuzzy began hurriedly.

Larkin became tense. "Where is he?"

"Waiting outside, Chief. I brought him with me. His name is Halleck."

"Good!" Larkin turned quickly to Jupe. "Take one of those tables over there. Watch the guy when Fuzzy brings him in. Then go out and hail an airtaxi. Follow him when he leaves.

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Get it?"

Jupe nodded. "Right, Chief." He rose from the table and took another look across the room. Tilting his rain helmet back upon his head, he seemed apparently to go to sleep.

Almost simultaneously, Dino entered the bar and grill. He came forward sheepishly.

"You overgrown lizard!" Fuzzy snapped scathingly. "I got a good mind to turn you upside down and inside out!"

"Aw, but how could I have known the police would trace the money?" Dino protested.

"How could you have known!" Fuzzy seemed about to strangle. "How do you know anything, you big dope? You're so dumb, you'd swallow your foot if you thought it was something to eat."

"I've taken just about enough out of you," Dino growled. "One more word, and I'll peel you like I would a banana!"

"Try it!" Fuzzy raged. "Just you try it. I'd hit you so hard you'd bounce!" And in spite of the fact that Fuzzy's bare five feet of height was dwarfed by Dino's bulk, he looked almost capable of doing just that.

"Tut, tut," Larkin interposed calmly. "What's this all about, boys?"

"Him!" Fuzzy pointed wrathfully at Dino. "That lame-brain has been spending the *Asteroid Queen* money —and now the Rangers know we're in Luna City."

"All right, all right, I admit it," Dino said. "But I'm not the only one that makes mistakes once in a while. What about the time Fuzzy—"

Larkin held up a silencing hand. "We'll discuss this later. Right now we've got business to attend to. Dino, you go sit down at the far end of the bar. Fuzzy, you bring Halleck in."

Halleck was a short though powerfully-built man with a dark, hard face. His black eyes narrowed when Fuzzy brought him to the table at which Larkin was sitting.

"Captain Skylark, eh?" Halleck said coldly. "I might have guessed it, after that televideo newscast."

Larkin bent his head in a slight nod of acknowledgement. His lips smiled, but his grey eyes were icy. "Captain Skylark at your service, Halleck. Sit down?"

Halleck seated himself cautiously. Something that might have been a vengeful glee shone in his gaze. "Well, you certainly got yourself into something here in Luna City. Looks like the end for you. The place is filthy with Rangers."

"I'll take my chances," Larkin answered quietly. From the corner of his eyes, he saw Jupe rise and stagger in apparent drunkenness from the room.

Halleck abruptly leaned forward on the table. "All right, about that cargo of *vango*—you've got it with you here in Luna City?"

The Skylark nodded shortly. "Right —and you can have it for a price."

"What did you do with the boys who were bringing it in?"

"They passed away, poor fellows. Too bad—but they really shouldn't have been so stubborn."

Halleck half rose from his seat. "Damn you, Skylark—"

WITH A flowing motion, as smooth as it was sudden, Fuzzy pressed close to Halleck. Against the man's side, hidden from view of the others in the bar, he held a small, wicked blast-gun.

"Easy!" Fuzzy hissed. "Mind your manners, Halleck. Your friends had no business smuggling *vango*. They got what was coming to them."

Halleck reseated himself sullenly. "All right, you've got the advantage

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

of me. But I'm not going to forget this."

"Enough of this!" Larkin snapped. "Now look, Halleck, are you interested in getting that cargo of *vango* or aren't you?"

"Of course," Halleck growled. "What's the price you're asking?"

"Twenty-five thousand credits." Larkin said evenly.

"What! Why, that's—"

"Robbery," Larkin broke in. He nodded. "That's just what it is, Halleck. But your superiors will either pay it, or no *vango*."

Halleck's black eyes blazed with rage, but he made no further outburst. When he spoke again, his voice was strangely equable.

"All right, Captain Skylark, it looks like we'll have to pay the money whether we like it or not. Now, about the transfer—"

Larkin held up a detaining hand. "I've already taken care of that. The cargo of *vango* has been placed in a warehouse locker at North Spaceport. I've got the sonic key to the locker. The number is on the key. After you have gotten in contact with your superiors, I will give you the key in exchange for the money. Is that clear?"

Halleck nodded quickly. "About the place of the transfer, how about the Golden Galaxy night-club?"

"It's as good a place as any, I suppose," Larkin responded, with a shrug.

Halleck rose. "See you at the club, then." He left.

"I don't trust that guy," Fuzzy squeaked. "He'll try to trick us, Chief."

"Of course he will," the Skylark agreed calmly. "But to be successful, he'll have to beat us to it."

Dino rejoined them at the table. "What next, Chief?" the huge Venusian wanted to know.

"The first thing to do is to get out of here," Larkin answered. "Halleck may try sending a gang of thugs to get the sonic key. We'll go to our spaceship hanger at the port. It'll be a good place to hide out until tonight."

Larkin stopped at the bar to leave a note for Jupe with the bartender. He added a generous tip, and the man promised to see that Jupe got the note. Then, outside, he hailed an air-taxi.

LARKIN was very quiet as the air-taxi soared on its way to North Spaceport. He rubbed the knuckles of his left hand across the base of his chin, while his grey eyes stared unseeingly before him, a sign to those who knew him that he was lost deep in a maze of scheming thought. There was a slight pucker between his level brows.

The televideo set inside the cab was going full blast. A newscaster had just finished reporting that the Spotted Sickness had broken out in a new section of Mars. The Skylark seemed hardly to have heard him, though the pucker between his brows had grown deeper.

Then a report of an entirely different nature blared from the screen. Suddenly Larkin was alert.

"Flash! From official sources comes the news that Inspector Gregory Welton and several squads of crack Interplanetary Rangers have arrived here in Luna Cty. The veil of secrecy has been lifted, and now all newscasting sources are at liberty to divulge the purpose of this massing of our guardians of the law. Their mission is none other than the apprehension of that famous, happy-go-lucky outlaw, Skye Larkin, who had been traced here through credit-pieces looted from the *Asteroid Queen*.

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

"It will be remembered that the blame for the pirating of the great passenger spaceliner had been laid to Skye Larkin. A short time later, an anonymous call to the Interplanetary Ranger base in Thoron City directed them to a spaceship in the Redlands Desert some distance away. Here the Rangers found every one of the men aboard unconscious and bound. Nearby were the currency chests from the *Asteroid Queen*. Several of them were empty. Under Psycho-scope examination, later, these men were revealed to be the actual pirates who had looted the *Asteroid Queen*. As to those of the currency chests found empty, the pirates accused Skye Larkin, whom it seems had been mainly instrumental in their capture."

The newscaster coughed and rattled his sheaf of reports. Had anyone looked closely at his face in the televideo screen, they might have seen the ghost of a grin hovering about his lips.

The newscaster went on, "Traffic through all air valves is being conducted under strictest police regulation. Ships will not be permitted to enter or leave the city without the approval of Commissioner Allenby. Authorities here are confident that Skye Larkin will be caught in the net. Thus, it seems, that the career of the cleverest, most likeable outlaw the System has ever known is to be brought to an abrupt end. . . ."

"And I'm afraid he's right," Fuzzy muttered glumly.

The Skylark chuckled—a rich, bubbling chuckle. He was sitting bolt upright in his seat, tense and vibrant. His grey eyes flashed with a triumphant glee.

"You're wrong, Fuzzy," he laughed. "You're both wrong."

"What do you mean, Chief?" Fuzzy demanded eagerly. "Have you got a plan to get us out of the city?"

Larkin chuckled again. "Right," he answered. "Listen." And when the airtaxi finally reached North Spaceport, Fuzzy and Dino were chuckling, too.

Larkin found the port strangely quiet. Lacking now was the roar of jet-tubes, the hum of valve machinery, the sharp blasts of all-clear whistles, that he remembered. Instead there was a tense, strained silence. Only occasionally did the great, sliding cradle move through the valve to bring in or send off a spaceship.

Interplanetary Rangers in their green and gold uniforms were seemingly everywhere. Larkin walked some distance ahead of Fuzzy and Dino, so that they would not be identified as a group. But the Rangers apparently found nothing of interest in a quili-pod planter bound, most obviously, for one of the dives at the fringe of the port. Neither were they interested in the quarreling duo consisting of a Martian and a Venusian who moved in the same direction.

LARKIN was the first to reach the hanger in which his tiny though incredibly fast spaceflier had been stored. Here, some minutes later, he was joined by Fuzzy and Dino.

"Jupe should be here soon," the Skylark said, with a glance at his wrist chronometer. "The note I left at the bar directed him to meet us here. In the meantime, we'll begin our preparations."

Larkin produced a small object from one of the pockets of his bright, synthe-wool jacket and handed it to Fuzzy. He said, "This is the sonic key to the locker we rented. Get the *vango*."

"All of it?" Fuzzy wanted to know.

The Skylark shook his head. "Not

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

all. Leave just enough in the locker to make sure the Rangers will be very interested in our friend, Halleck."

Fuzzy grinned broadly. Clutching the sonic key in one hairy, small fist, he hastened out.

Larkin turned to the Venusian. "As for you, Dino, go to one of the spaceport supply stores and buy one container of white hull paint and another of red. And—oh, yes, Dino, the next thing we'll need is a woman's lipstick."

Dino stared in surprise. "A woman's lipstick?" he echoed wonderingly.

The laughter-lights were bright in the Skylark's eyes. He chuckled. "Yes, Dino—a woman's lipstick."

When Jupe Holt arrived at the hanger some twenty minutes later, he found himself gazing at a scene of the most intense and bewildering activity. Paint sprays gripped in their hands, Larkin, Fuzzy, and Dino, were changing the hull of the spaceflier from a bright silver into a pure, gleaming white.

Larkin hastened over to his lieutenant. "You followed Halleck?" he asked eagerly.

Jupe nodded grimly. "Yeah—the rat. Chief, the first thing that Halleck did was to send for a pair of the ugliest mugs I've ever seen. They went back to the bar, and for a moment I thought hell was going to bust loose. But they came out almost immediately, and I knew you had left.

"Halleck was pretty sore about it, I suppose, and trailing him was easy. He went straight to the office of Jandel Gorham, president of Intersystem Exports, in the Universe Building. Then I went back to the bar, and got your note."

"Jandel Gorham," the Skylark said softly. "Who'd have suspected it? His export business is just a blind for *vango* peddling, of course. Well, that takes care of the last item, Jupe. And now to finish painting the ship." Larkin grinned impishly. "Pretty nice job so far, eh?"

IT WAS NIGHT in Luna City. The mighty transpolite shell had been rendered opaque by polarization, and the metropolis beneath it had become a fairyland of jewel-like lights. Air-taxies and jet-planes flitted like fireflies through the darkness. The lights atop the pedestrian catwalks that linked the towering, multi-colored buildings were loops of glowing gems.

Inside the Golden Galaxy, Luna City's most celebrated night spot, all was gaiety. A Venusian *Panga* band, which at that moment held the spotlight, was drumming out a wild, pulse-stirring jungle rhythm. Skye Larkin and Jupe Holt, seated at a small table in a far corner, watched the writhing contortions of a chorus of scantily clad girls who were dancing to the music of the band.

Larkin toyed with a small object as he watched the chorus girls. Had anyone looked closely, they might have identified it as a woman's lipstick. Occasionally the Skylark glanced at his wrist chronometer. He was becoming impatient. He and Jupe had been sitting here for quite a while.

Abruptly Jupe touched the Skylark's arm. "There's Halleck now, Chief!"

And then Larkin saw him. Faultlessly dressed in evening clothes, Halleck was sauntering among the tables, his eyes roving to and fro.

"Stay here, Jupe," Larkin told his giant lieutenant. He rose from the table and walked up to Halleck. The two exchanged curt nods, then moved together toward the bar.

"You brought the sonic key?" Halleck asked, when they were seated.

Larkin nodded. "And the money?"

"Right here," Halleck said. He pro-

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

duced a flat package from an inner pocket of his evening jacket.

Larkin tore off a corner from the wrappings, and leisurely he counted the denominations. Then, satisfied, he nodded. He handed Halleck the sonic key.

Halleck rose. His black eyes were mocking. "Well, that's that. So long, Skylark."

"The same to you," Larkin said lightly. But he did not smile. It seemed to him that there had been something ominous about Halleck's farewell.

The Skylark rejoined Jupe at their table. His grey eyes shone like bits of polished steel. Danger was here—gathering about like a storm cloud. He felt it as though it were a tangible emanation. It stimulated him, made him keenly alive and alert.

"You got the money, Chief?" Jupe wanted to know.

Larkin nodded shortly. He was tense, his gaze darting and probing about the night club.

Jupe's broad face was lined with strain. "Do you think it will happen right away, Chief? Won't we have time to get away?"

"I'm afraid not, Jupe. It's going to happen any moment now. Halleck doesn't intend to have us get away with the money. This is a trap—and he must have had it timed perfectly."

The Skylark was correct. Seconds later, there came the pound of approaching feet. A squad of Interplanetary Rangers, resplendent in their green and gold uniforms, burst into the night club. At their head was a short, fat man with a red, round face.

And now the Skylark chuckled. "Our friend, Porky Welton," he murmured. "This is it, Jupe. Do you see the scheme? It's quite clever."

THE SKYLARK took a small object from a pocket of his jacket. He tossed it into the air, caught it deftly. "Before coming here to the club, Halleck put in a call to the Rangers, tipped them off that we would be here. After we had been duly caught and incarcerated, Jandel Gorham would accuse me of having stolen the credits which, of course, would have been found upon my person. Thus he would get his money back and I would no longer be a menace. Isn't he going to be surprised, though?" And again the Skylark tossed the small object into the air, and again he caught it deftly. One would have had to have very keen eyes to make out it was a woman's lipstick.

Inspector Gregory Welton had now ascended the night club stage. His men had deployed themselves at strategic positions about the great room. The orchestra had fallen silent. The people at the tables had risen to their feet, and their alarmed voices made a hubbub of sound.

Inspector Welton shouted over the general clamor. "Silence, please!" He waved pudgy arms, and slowly the noise died down. "Ladies and gentlemen, I regret the necessity of having to spoil your evening, but I have just been informed that Skye Larkin is here among you. Accordingly, a thorough search will be made. No one will be allowed to leave until it is over. Now, ladies will gather on one side of the room, men on the other."

There was some confusion at first, but the Rangers were very efficient. A band went among the scattered tables, quietly and quickly carrying out the details of the separation. The others stood watchfully at all points about the room, eyes narrowed, drawn guns at the ready.

Almost it was over. The women had been herded into a line along one wall, men along the other. Then it

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

happened.

There was an oath. From among the group of men came a terrified voice.

"My God—it's the Spotted Sickness!"

For a moment there was a heavy silence. The men separated, and now, threshing about in agony on the floor, were two men dressed in the garments of quili-pod planters. But it wasn't the garments of the two men at which everyone was staring. It was the multitude of red spots which covered their faces and hands.

A woman screamed. As though it were a signal, all hell broke loose.

The groups of men and women along the walls broke into a maelstrom of pandemonium. Shouting, screaming, they rushed for the exits, pummelling and trampling others in their haste. It was a kaleidoscope of sound and action. All was noise and confusion. The club was a seething chaos of human bodies—all fighting madly with but one purpose in mind, and that to flee the scene of this latest visit of the Spotted Sickness.

TRAINED, hard troopers that the Interplanetary Rangers were, they were helpless in the face of that savage onslaught of terror-stricken men and women. Caught in the flight like leaves in a wind, they were hurled in all directions. And then the torrent burst from the exits.

The alarm spread like wildfire throughout Luna City. *The Spotted Sickness!* People everywhere caught the contagion of fear. Within a few hours, the metropolis was little better than a madhouse.

Newscasters went hoarse as they feverishly recited their reports. Each passing second, it seemed, brought news of some further violence.

Aside from the furor caused by the frightened populace, however, there were two items of special interest. The first was that Skye Larkin had escaped from the Interplanetary Ranger net about the Golden Galaxy. The second was that the mysterious *vango* organization in Luna City had at last been destroyed.

This last, strangely enough, had been accomplished by an anonymous tip-off to police headquarters. Directed to a warehouse locker at North Spaceport, the Rangers had apprehended a man named Halleck in the act of removing a cache of *vango* from the locker. Almost simultaneously, a raid upon the office of Jandel Gorham, president of Intersystem Exports, had brought to light a further quantity of the drug. Gorham loudly and vociferously claimed that he had been framed by a Martian and a Venusian who had come to see him upon a business pretext a short time previously. But under psychoscope examination, both Gorham and Halleck were proved to be ring leaders of Luna City's *vango* organization.

Meanwhile, the fear epidemic raged through Luna City. All spaceports were in turmoil. Panic-stricken mobs fought with police in the sand of the landing fields. Crowds besieged each individual liner and freighter, fighting madly for berths. Spaceship captains furiously demanded egress from the valves, declaring in the emergency that police edicts were to be ignored.

Consequently, when a small white spaceflier ambulance with a large red cross on each side of its hull appeared in the cradle of the valve at North Spaceport, no questions were asked. The valve was duly opened, and the spaceflier darted out into the void.

Within that spaceflier Skye Larkin chuckled—a rich, bubbling chuckle. The laughter-lights were bright in his grey eyes as he looked at Jupe, Fuzzy, and Dino.

"Well, that's that, boys," the Skylark said.

THE END

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

The BIOLOGICAL

By ANTHONY B. OTT

A dread experiment was taking place on the secluded estate—where giant insects were held in check only by a single barrier

"You aimin' to take a job at Doc Brandon's?"

Bill Clinton watched the garrulous old man hobble to the gas pump. The old geezer was certainly curious. He must spend more time pumping strangers than gas.

"Yes, I am," Bill said. His cool gray eyes surveyed the ramshackle gas station and its owner. The old man put the nozzle in the filler pipe, and spat tobacco juice into the dust.

"You one o'them scientists too?" the old man probed.

"I'm an engineer," Bill said shortly—he looked into the man's guileless eyes. "So what," he continued, "I'm going to work for Doctor Brandon. Just fill the gas tank and stop worrying about me. Curiosity killed the cat, remember?"

"Heh, heh," the old man cackled, "Got your dander up, eh? Don't allow you have to get mad at a man who's tryin' to be friendly. Folks down here jest like to know what's goin' on. Figgered if I can't learn nothin' from Brandon—or his friends—maybe—you'll do a little talkin'. Ain't no harm in a man tryin'."

Bill burst into laughter at the old man's candor. He drew a crumpled handkerchief from his pocket and wiped his sweating forehead. The hot Florida sun beat down with dreadful intensity. The station wagon was like an oven.

"I'm sorry, old timer," Bill apologized laughingly. "I'm not used to talking about something I don't know anything about. I can't tell you a thing. I just got off a construction job in Jacksonville—and I saw Doctor Brandon's ad for an engineer. Here I am. That O.K.?"

The old man hung up the gas noz-

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

BARRIER

zle. "Wal, I reckon I ain't goin' to get anythin' outta you." He looked at the pump. "That'll be two dollars and thutty cents."

His brows knitted as he took the money. "Cain't figger it out," he said to Bill. "Don't rightly know what Brandon's game is. Got some o' them scientist fellers, some workmen, an' his daughter, an' now you. Figger maybe he's gonna make some kind of a factory there. Got enough machinery an' such. Trucks went by here day an' night. Feller's got a sight of money!"

"If you want to know so badly," Bill said, "why don't you ask the man next time you see him?"

"Already done that—mighty unfriendly, that Doc Brandon. Don't want to talk about nothin'." The old man shook his head. "Cain't figger folks nowadays—wal, good luck, young feller. Drop back again." His

The creature reached out for him and he raised his hands in desperation . . .

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

face brightened. "It ain't hurt business none."

"Thanks," Bill said. "I will. So long."

Bill Clinton put the car in gear and started up the road. The breeze created by the car's motion was a godsend. He eased his sweat-soaked frame back more comfortably. His field-hardened hands guided the battered station wagon smoothly. He thought about Brandon.

The man *had* been curt over the phone. "We need a general all-round engineer," Brandon had said. "We're setting up an experimental station and we want a man who can supervise a small power plant—emergency—a sub-station and who can do any of the general work we'll require; put in constant temperature baths, do electrical installation, and so on. Can you handle the job?" "I'm your man," Bill had said. "I'll be down in a day and a half." Well, here he was, almost there. Brandon, he knew, had made a vast fortune and had built a huge empire in drugs and pharmaceuticals—so the man could do anything he wanted. From the little Bill had heard, research was still Brandon's first love—and—research he did himself—not research in the company laboratories.

BILL SAW the sign to the side of the road just at the junction of a turn-off. "Brandon's Laboratories—No Trespassing," it said. Bill turned in and found the road a firm ribbon of asphalt, though heavily rutted as if by heavy trucks. The jungle-like trees and vegetation formed an impenetrable wall to either side of him.

Within ten minutes he had come to the clearing. Bill was surprised at what he saw. There was no makeshift arrangement. There were a number of concrete-block buildings, an outside substation and a power-line connected to it. To one side was a squat structure with a chimney, housing evidently, the emergency power plant. Simple landscaping had made the place rather attractive.

He pulled up before what was obviously the office and residence of the staff. Bill climbed from the car and pulled his sticky shirt away from his back. He stretched his rangy frame and yawned. He went in.

As he stepped into the office labeled, "Dr. Brandon" he saw that it was empty save for a girl seated at a typewriter. She was working furiously. She stopped as she heard the door close. When she looked up, Bill's heart did a double jump.

Bill was no stranger to women, but this girl was positively beautiful. Her long black hair had been piled up in a peculiar hair-do. Her smile was warm and friendly and her eyes were clear and intelligent. She stood up and the automatic wolf in the back of Bill's mind, whistled long and low at her perfect figure.

"Don't tell me," the girl said smiling, "I know. You're the engineer, Mr. Clinton—right?" She came forward and gave Bill her hand.

"That's right," Bill said. "Is Doctor Brandon here?"

"No," the girl replied. "He's in lab number three. He should be back soon. Won't you wait?"

"I hardly think I'd go out into the heat again if I didn't have to," Bill said. "You're—"

"I'm Celia Brandon—daughter—and secretary. I work hard, I'm not a social butterfly—and I hope you'll like it here."

"I'm quite certain, I will, Miss Brandon," Bill said. "Would you like a cigarette?"

"I'd enjoy it," she agreed. "Now if you'd care to, let me hear about you." In a few moments they were engaged in an animated conversation and Bill filled in his background for her. He

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

liked her at once.

"I got sick of doing nothing. The social life palls—I once was a typical deb, you know—so I decided I'd try working for change. And I like it. It's good for my soul."

"But you must have some relaxation," Bill insisted. "Work palls too," he added laughingly.

"The plane or the helicopter can drop us in Miami in no time at all," Celia explained. "We have no problems. Oh-oh. Here's Dad's assistants."

Bill turned and faced the two men who had just come into the office.

One was short and pudgy, his face glistening with sweat. There was a cheery grin on his face. "Hi, Celia," he chirped.

The other was tall and dark, handsome and polished. Bill thought; this guy's been around. "Hello, Celia," he drawled.

"Hi, boys—we got a new man just now. Mr. Clinton, this is Dr. Shepherd,"—the short man stuck out his hand— "and this is Dr. Fenwick."

Bill sensed an instant hostility in Fenwick's manner though the outer courtesy was there.

"Glad to have you with us—you're the engineer that Brandon spoke about, aren't you?" Bill thought the word "engineer" was slightly sneered.

"Yes," he said amiably, "Miss Brandon has been telling me about the place. But I still don't know what goes on."

"Well, you won't be concerned with the research end, Clinton," Fenwick said. "Don't worry about it."

"We'll brief you on the details though," Shepherd said cordially. "I always want to know everything myself."

"Thanks," Bill said. "I *am* curious."

"Here's Dad," Celia interrupted. "Here's your engineer, Dad," she greeted him. I'll bet, Mr. Clinton," she said, turning to Bill, "that Dad has you to work within the hour."

"How do you do?" Doctor Brandon said. Bill acknowledged the introduction and sized up his new employer. Brandon was not one of the "idle rich." He looked worried and introspective, absorbed and contemplative. He was tall and gaunt and his eyes were red.

"I'm ready to go to work as soon as you wish," Bill said.

"Celia'll show your room. It won't be necessary to start until tomorrow, but I'd like to talk this job over with you tonight after dinner. We dine at seven-thirty. Meanwhile, make yourself at home."

UNDER CELIA'S guidance, the afternoon went pleasantly. Bill liked the layout of the laboratories, though he could understand very little. Celia didn't exactly avoid the subject of the work being done, but neither did she go into profuse detail. Several times Bill was on the point of asking her bluntly just what was going on, but he thought the better of it.

After a while, a very pleasant while, Celia left Bill to his own devices while she went back to the office. Bill saw there were numerous other employees, both men and women in the laboratories. And the standard labor force consisted of a surprisingly large number of hard-working Cubans. For the most part, those outside the laboratories were busy in construction and landscaping. Altogether it was an impressive set-up.

Bill wandered into one of the labs but he didn't get beyond the small office entrance-way. The short fat scientist, Dr. Shepherd stopped him with a critical but friendly, "tough job going on. Sterile conditions, you know." Bill didn't press the matter but chatted amiably with Shepherd for a half hour.

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

He examined the power plant and found it to be a first rate thousand horsepower Diesel engine coupled to a generator. It was here he spoke with the Adonis of the labs, Dr. Fenwick. Bill's instant dislike of the man was confirmed.

They spoke casually of a number of things when suddenly Fenwick turned to him and said:

"Clinton," —his tone was patronizing—"I thought I should warn—no, caution—you that Miss Brandon and I—well, that is, we have an understanding. What I mean is, I wouldn't like you to get the wrong idea. You see—"

"—I see exactly," Bill cut in icily. "You don't want me to poach on what you think is your territory, eh? Don't you think that Miss Brandon is the judge of that?"

Bill turned on his heel and strode away. But he could feel the boring hostile glance of Fenwick in his back. If looks could kill—

That evening at dinner, Bill met a number of other workers and had a pleasant time. Celia was charming and gracious. Fenwick noticed the attentions—exaggerated to him—that Celia seemed to be paying Bill. He said nothing but there was a white tenseness about his nostrils.

After dinner Bill, Fenwick and Celia joined the Doctor in his office. He had a map on his desk and he began without preliminaries.

"Clinton," he said, "this is a map of the labs and the surrounding land which I own. It's a plot two miles by four, perfectly rectangular. But as you've noticed, it's a maze of swamp and jungle. I'm going to build a fence around it—that's where you come in. You're going to take the labor crew and start to work tomorrow morning. I want you to work as fast as possible. The experimental work in the labs demand it."

"What sort of a fence?" Bill questioned, "And why?"

Dr. Brandon's explanation took an hour and when he was through, Bill's brain was reeling. The incredible fantasy of it!

"...so that's the story," Brandon concluded. "Come into the lab a moment and you'll see what I mean."

As if in a dream Bill followed the scientist. Dr. Brandon pointed to one of the glass cases.

Bill stared for a long time. Beneath the glass was an ordinary beetle, ordinary in all but one sense—it was a foot and a half long! It looked like a grotesque model such as one sees in a museum of natural history—but there was one difference; this "model" moved! Bill watched its obscene motions for a minute or two, his face turning a sickly green.

Finally he said: "All right, Dr. Brandon. I'll start work on the fence first thing in the morning. "Good night, everyone," he managed to say hoarsely, then turned and walked to his room. He saw very cleary the contemptuous grin on Fenwick's face.

WHEN BILL reached his room, he sat on the edge of the bed and lit a cigarette. He found to his surprise that his hands were shaking. Calm yourself, you fool, he told himself. It's just a scientific experiment. Nothing can go wrong—especially if the fence is put up. Through his mind wandered the weird story he had just heard.

Brandon had long been interested in the nature of life. With the new opportunities afforded by the wide use of radioactive materials for research, Brandon had spent a fortune in study and experiment and had at last discovered that a radioactive isotope of carbon had the unbelievable effect of enlarging insect life! It was Brandon's intention to thoroughly

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

exploit this new discovery to his complete satisfaction. That was the reason for the isolation and the lavish laboratory facilities—and the semi-tropical location.

So far they had not attempted to permit the creature to grow beyond a foot or two in length. And in addition to that he had made injections only into ants, beetles and other insect species unable to fly. This gave Brandon control over his subjects, because of a peculiar property associated with the enlarged insect specimens. They were unable to come near ordinary current-carrying electric wires. If brought within ten feet of such wires, they died; the reason was still unknown.

But it provided a perfect barrier. Brandon referred to it as his "biological Barrier." It—a wire carrying current—was an automatic threshhold over which the creatures did not dare to pass.

Now Bill knew the reason for the simple fence already constructed. It was merely a series of poles surrounding the building compound, and carrying a single conductor to a hundred and ten volt source. The fence was a barrier against escape from the labs, should anything ever happen. Now the fence around the estate would serve as a protection when Brandon decided to expose the enlarged insects to a more natural environment.

Bill sat for several hours thinking about what he had learned. It was incredible that Dr. Brandon had succeeded so well already. He had said that undoubtly there was a limit in size to which the insects could grow, but that too was a matter of experiment.

When the experiments had been completed, Brandon was going to issue a report which would shock the scientific world. He had laughed at Bill's suggestion that such an experiment carried with it too much danger and should be a shared experience—not an isolated attempt. What of the danger? Brandon saw no danger. The fences, the electrical barriers, would elimate any danger of that. The emergency power supply, the weapons, including bazookas and rifles—all these plus the intelligence of his men, Brandon was sure he would be adequate.

Bill smashed out his cigarette. I'm stuck, he thought. I've got to see this through now. Savagely he undressed and fell into bed. The night passed uneventfully—except that when he awakened he had that groggy sense of one who hasn't slept well!

"You were rather stunned last night," Celia greeted him the next morning. "I thought you were going to be sick."

Bill essayed a wry grin. "You didn't expect me to laugh at the sight of those horrors, did you?" he retorted. His face grew serious. "Listen, Celia," he said, using her name for the first time, "I'm not a scientist, and I don't know much about this biological barrier, but isn't your Dad taking an awful risk—with everybody I mean—not just himself?"

The laugh vanished from Celia's lips.

"Those damned insects might grow to the size of horses," Bill continued. "Doesn't anyone here realize how dangerous that could be?"

"I know what you mean, Bill," Celia said. "But I think we all whistle in the dark. I've approached Dad about it a number of times, but he's convinced that he's taking all safety precautions. He doesn't intend to really cut loose until the entire estate is protected."

They were interrupted by the sudden appearance of Dr. Fenwick and immediately after breakfast, Bill set

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

to work on the fence. The laborers didn't question him nor exhibit any curiosity. They were completely unaware of the monstrosities in the labs.

IT TOOK Bill a week and a half to get the fence up to his satisfaction and when he was through it was tested thoroughly a number of times. The so-called "f e n c e" consisted merely of heavily insulated, many-stranded wire attached to tree trunks, stakes, posts and any convenient supports. Three separate wires were used, insuring protection in case any two broke, a wide margin of safety. In effect, when the fence was done, the entire estate was surrounded by three wires carrying ordinary sixty cycle alternating current at a moderately low voltage. According to the labs this was sufficient to prevent any creature—Bill didn't know what to call the mutated insects—from going near it.

The job had not been easy and Bill was physically exhausted when he finished. The swamp and jungle were almost impenetrable and he knew he would have trouble if any breaks occurred in the line. In the power plant he rigged up a special warning device designed to detect any break in the conductors.

He examined the other weapons of the estate, and checked them thoroughly. The heavy elephant rifles, the bazookas, transparent plastic-helmets with oxygen apparatus—all were in perfect condition. The latter were intended to prevent asphyxiation and possible death from any of the gases excreted by certain types of beetles.

"You've done a fine job," Brandon commended him one night at the dinner table. "We'll soon be able to release the mutated insects on the estate proper. Fortunately they daren't cross a current-carrying wire. Eventually they'll find that out too."

"Dad," Celia said, "the trucks will pick up the workers tomorrow."

"Good," Dr. Brandon said. "We can't have any more around here than necessary. I think a colony of twenty people is enough to maintain the place for a while. Agreed, John?"

Dr. Fenwick nodded: "More than enough. Especially since Clinton here has done such a fine job."

The malice and dislike didn't escape Bill. He knew he was going to tangle with Fenwick before long. Especially since the latter had noticed how well he and Celia were getting on. She was spending more and more time talking with Bill during the evening.

Dr. Brandon, I'd like to ask you a question." There was an iron-hardness about Bill's mouth.

"Yes?" Dr. Brandon looked curious. What could an engineer ask a research biologist?

"Don't you think that this is a dangerous procedure? I mean, turning loose those gigantic insects isn't child's play. Suppose they attack you—or us? Wouldn't it be wiser to stick to the lab?"

"Mr. Clinton." The scientist barked out the name. "I hardly feel you're in a position to understand my work—much less question it. Yet, I'll give you a frank answer. Yes, it is dangerous. But I have the belief that the study of these creatures in a nearly natural habitat is going to tell me more about the nature of life than has been learned up to this time. We have adequate protection. The neighborhood is protected electrically—and there are no flying insects here. There is plenty of personal armament. Does that satisfy you?" There was anger in the man's voice.

"Well," Bill hesitated, "I..."

"You're welcome to leave at any time. Now, if you wish. We can take

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

care of the electrical system."

The last remark went home.

"I'll stay," Bill said abruptly, "The plant needs c l o s e attention—in case—" He left the sentence unfinished. There was a significant passing of glances.

Dr. Brandon turned to Fenwick. "We'll let out five of the beetles and five of the ants tonight."

Fenwick nodded.

"And Clinton—make sure everybody is within the compound—everybody!"

"I will," Bill said. He looked at Celia. She was staring at him. And the look on her face evidenced his own hesitation—it was the blank stare of fear!

THE NEXT three days went by like wild-fire for Bill. Conscious of his responsibility, he went over both the sub-station and the emergency power plant with a fine-toothed comb making absolutely certain that they were functioning properly. Bill shuddered to think what might happen if the "biological barrier" were allowed to go down for even a short while.

Dr. Brandon and several assistants spent much time now away from the laboratories, following the tracks of the monstrosities they had released. Already they had acquired a sizable amount of film and numerous observations of the creatures. And so far the animals had made no attempt to attack them.

Since the work was so successful and the sense of danger had passed, the operations began to be considered routine. Bill noticed that Celia frequently joined Fenwick and Dr. Brandon on these journeys into the "field." Yet something in the back of Bill's mind kept nagging him—this is more dangerous than it seems.

The first intimation of danger came, when Bill saw a party on the fourth day of observation carrying back one of the lab assistants. Oh-oh, he thought, this time they've done it; they've run into trouble.

"What happened to that lab assistant today?" he asked Celia that evening when they were sitting within the barrier fence surrounding the office building.

Celia grimaced: "Ugh! It wasn't nice. He was taking some close-up shots of a giant beetle—it must have been all of eight feet long—and suddenly it ejected a spurt of vapor or gas or whatever it is. I wasn't very close at the time, but I could scent it. Bill, it was terrible! I felt as if I were choking. Poor Fairman is going to be a very sick man for a long time to come. Dad says he's going to have him driven to town."

Bill shook his head: "It's lucky no one else got it. Please, Celia, be careful. This isn't anything for a woman."

Celia laughed: "Don't forget I'm a scientist too." She put her hand over Bill's. He covered it with his other hand. "Listen," he began. "Celia, I've been wanting to talk to you a long..." He broke off as a tall figure approached in the dust.

"Hello," Fenwick said. He had caught the little by-play. "Having fun?"

"Hi John," Celia said. "Yes, we are."

"I don't want to interrupt anything," he said significantly glancing down, "but Dr. Brandon has given orders that anybody who goes into the field must wear an air helmet. Fairman got a bad dose of that gas." He looked at Bill. "Clinton, you're supposed to go back to the office. Dr. Brandon wants you to drive Fairman in the light truck back to the hospital in town."

There was a smile on his face. "We'll take care of the power plant,"

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

he added.

"You'll like my going for a while, won't you, Fenwick?" Bill asked as he rose to go.

"Listen, Clinton!" Fenwick said sharply. "Everything around here was going nicely until you came." He glanced toward Celia. "Personally I don't see the need for you at all. I'll be frank with you—I don't like you and I never will. And while we're at it—I'll tell you again. Stay away from Celia!"

"John!" Celia broke in abruptly. "You're forgetting yourself. I'll see whom I please. Remember that! I don't like your possessive tone." She turned toward Bill. "'Bye Bill," she said, "please be careful."

"I'll be back soon," Bill said. "Don't worry." He grinned mockingly into the enraged Fenwick's face.

THE UNCONSCIOUS Fairman was loaded into the back of the light truck on a cot. "Can you cross the barrier all right?" Dr. Brandon asked.

"Easily," Bill replied, "I left plenty of slack in the wires across the road. I just have to lower them and drive across—then I'll replace them. I'll be back by tomorrow afternoon."

"I've called the hospital and made reservations. And I've explained the cause." Brandon looked a little worried. "Fanning thinks he can take care of Fairman without trouble."

Bill threw the truck in gear and gave it the gun. He had to give Fairman no attention. The man remained unconscious for the duration of the trip. It was a long monotonous drive.

As soon as Bill had delivered his human burden to the receiving room of the hospital he got back into the truck and headed back for the estate. He didn't want to be away from the potentialities any longer than he had to.

It was with relief and gratitude that he drove up to the office building, tired but pleased that things appeared to be normal. Brandon and his assistant were all in the field. Celia had gone with them. Only a couple of maintainence people remained. Bill checked over the power equipment making sure the lines were still perfectly electrified. Apparently everything was in order.

All through the afternoon he was disturbed by the sound of gunfire coming from various parts of the estate.

Toward evening he saw the very large party making its weary way back to the office building.

Celia greeted him enthusiastically and out of the corner of his eye Bill caught Fenwick watching them. "I don't think our friend likes me very much," he observed. "If his looks could kill..."

Celia laughed: she glanced up at Bill mischievously. "He thinks I'm in love with you."

Bill stepped toward her. "Celia," he said tensely, "Celia, I--"

"Clinton!" Dr. Brandon called loudly and interrupted the moment. He went over with Celia to where the group was standing. All looked fatigued.

"Join us tonight," Brandon said. His face was flushed and there was the look of fear in his eyes. "My experiment," he said ruefully, "is working better than I like. The damned beetles have started reproducing!"

"My God!" Bill said startled. "How bad is it?"

"There're scores at least," Brandon said. "We killed thirty-five today already. And we're going right back at it tonight as soon as we clean up and eat. So take a helmet, a rifle,

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

plenty of ammunition and we'll get to work."

The conversation at dinner was animated as all discussed the day's events. Bill gathered that the susceptibility of the creatures to gunfire varied. Some were killed easily—others died hard. There had been several close calls during the day. The ferocity of the beetles was something to encounter.

That night, heavily armed, they divided themselves into small parties. Everyone carried powerful flashlights in addition to strong acetylene lamps. Bill, Celia, Fenwick and a workman called Johnson formed one of the groups. Johnson carried a large number of bazooka projectiles while Bill carried the bazooka in addition to a rifle, and plenty of ammunition for it.

Bill suggested they head for one of the isolated corners of the estate in order to catch any of the creatures who had naturally taken to the forested swamp areas. Fenwick grumbled at the idea—but Celia and Johnson were enthusiastic.

"Dad says we can't leave a single one of these monsters alive. We've got to make sure!" Celia was animated.

It was an eerie somber group that made its way into the forested and gloomy jungle.

Bill felt Celia stiffen beside him. "Look!" she whispered frantically.

Bill followed her pointing finger. It was the first time he had seen any of the full-grown horrors. They had come upon the four ants. Even Fenwick breathed a sigh of gratitude. "Thank God they haven't reproduced," he said.

BILL WATCHED the horrors a moment. He saw four monstrous chiton covered bodies at least eight feet long. Their huge mandibles made snapping sounds and their grotesque many-faceted eyes stared unwinkingly. The rustle of their bodies sent chills up and down Bill's spine. He unlimbered the bazooka.

"Don't shoot," he cautioned his companions. "We'll try and get them all at once." He knelt on one knee, while Johnson slipped a projectile into the bazooka tube. Even as he took aim at the wriggling writhing group of horror, he could see them start to move toward the intruders sluggishly. The rasping sounds of their motion were hideous.

Calmly Bill let them come on. The four gigantic ants remained in a compact group, always touching each other as if for guidance. Their resemblance to humans in this respect was striking. Bill waited until they were thirty feet away. The night sounds of the swamp, the sounds of the ants, the heavy breathing of Celia and Fenwick and Johnson and himself—all these things he noted. Then he touched the button of the bazooka.

There was a powerful *whoosh* as the rocket projectile left the barrel. An instant later came the explosion. The three nearest ants disintegrated in a coruscant lash of flame.

The fourth one of the terrible creatures was untouched or at least uninjured. He suddenly and abruptly burst into a speedy crawl straight for Bill. Rather than waste another projectile, Bill said "fire!" but even as he spoke, Fenwick's gun was going. The bullets didn't seem to faze the creature. Frantically Bill shouted, "Run!"

Then his own rifle began to speak as he aimed carefully for the huge faceted eyes. They pulped under the accurate fire of his gun. Slowly the ant sank to the ground and ceased moving. Bill stood up and breathed a sigh of relief.

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

"Let's hope that they didn't reproduce," Celia said, "Especially if they're that impervious to gunfire."

"You know more about this than I," Bill said to Fenwick, "what do you think? Is it likely that there are more of them?"

"I think Celia's right," Fenwick said. "I don't imagine there are any more or we'd have seen them. Did you notice how they kept together?"

"Only too well," Bill said.

"That's an advantage," Celia volunteered. "Look what the bazooka did to a concentrated bunch of them. The beetles are worse. They've come singly—and there are a lot more of them!"

As they proceeded through the dense thickets, now on a dry spot, then again knee-deep in muddy water, Bill's mind turned over the dreadful possibilities that existed in this little microcosm. Suppose they didn't succeed in exterminating all of the monstrous beetles? Suppose the barrier went out for a while and the insects succeeded in swarming over the surrounding swamps? It would be impossible obviously to cover the vast area taken in by swamp-land. Think what this could mean in terms of a problem for the world! The very conception was staggering. What a fool Dr. Brandon had been to release these creatures to roam his estates even with the elaborate barrier. Elaborate—huh! The word sounded ridiculous. The outer world was protected from an invasion of the insects so grotesquely magnified, by a thin barrier of three charged wires. What a meager "protection."

Bill's musings were interrupted. He stopped quite still. "There," he said softly. Celia, Fenwick and Johnson saw it at the same instant. And it was a weird sight!

SOMEHOW a huge alligator had allowed himself to be surprised by the huge beetle that now crouched over him. There was no sound from the man-made creature but the alligator was grunting and roaring in its own peculiar fashion. Bill stepped closer. The alligator was clamped firmly by a pair of armored mandibles. Its tail thrashed hither and yon and its gaping jaws opened and clamped on nothing. Then the other mandibles of the beetle went to work. Celia turned her head. It was sickening to see the ghastly pincers close down on the throat of the alligator. Calmly the beetle proceeded to tear the reptile to shreds. The ripping sounds carried far on the still night air.

Bill raised his rifle, selecting the apparently soft underpart of the upraised body of the huge beetle. He squeezed the trigger. The shot was effective for the creature slumped at once and lay slowly thrashing in its death agony—death agony if a nervous system so rudimentary, permitted such a thing.

Fenwick pumped a shot into the beetle to make sure. Its movements ceased.

Now and then the sound of gunfire could be heard in the distance. The other parties were doing execution too.

The hunt carried on for another two hours. Here and there they spotted isolated beetles and butchered them without difficulty. Bill began to feel more at ease. Evidently this large scale hunting, if kept up long enough would succeed in eliminating all of the obnoxious devils.

Fenwick and Celia were about a hundred yards ahead of Bill and Johnson. As they entered a large clearing covered with pools, the two crossed to the other side before Bill and Johnson. Suddenly Celia called

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

back:

"Over here, Bill! There must be twenty!"

Bill saw her rifle flare and the combination of moonlight and his acetylene lantern showed that she and Fenwick had indeed stumbled upon a grisly horde. As Bill and Johnson started toward the two advanced ones, their path was suddenly cut off—for straight between the two little parties crawled a large number of beetles! Bill guessed roughly, thirty! Then everything seemed to happen at once.

He saw Celia calmly fire into the horde confronting her, unaware of the menace at her back. But Fenwich half-turned and spotted the barrier between Celia, himself, and Bill and Johnson. He shouted:

"Come on, Celia! They're in back of us!"

The girl turned, saw the vast crawling horror and started to run before it should completely sever the path between her and Bill. Her foot slipped in a shallow pool and she went down, her rifle falling from her hands. She recovered it and rose. Quickly she levered home a cartridge and then shrieked—her gun had jammed!

Fenwick measured the oncoming beetles. His face turned white even as he fired. He calculated his chances. If he stayed by Celia or tried to drag her with him, they surely would be cut off. With a half-strangled cry, he ran! Bill watched the tableau in horror.

"Fenwick!" he cried, "Fenwick! You fool!"

The beetles were almost on the helpless girl. She could run nowhere except directly into their midst. She stood still, terrified and purposeless.

Bill took a chance. His bazooka began to flare and the monstrous forms curled up and died under its withering fire. Bill thrust the weapon into Johnson's hands: "Continue firing and finish them off."

He made a wild sprint toward the spot where the trapped girl stood. He sprang just across a pair of claming mandibles as they surged down. His rifle spurted flame. Then Celia was in his arms.

"Bill, oh, Bill!" she sobbed hysterically and clung to him. Gently he disengaged her arms.

"It's all right, honey," he comforted her, "but we're not out of the woods yet." His rifle continued to fire. The carnage and the slaughter were terrific. The mass of beetles melted under the devasting fire. And as fast as Johnson could load and fire, his bazooka spoke, cremating the creatures one by one.

Fenwick, recovering from his unreasoning terror was firing also into the beetle-mass.

In twenty minutes they had butchered all the gigantic beetles. It was now quite late.

THE FOUR of them walked wearily back toward the buildings. Celia walked at Bill's side, She had recovered her equilibrium and the terror was gone from her eyes. Johnson, carrying the bazooka over his shoulder was on Bill's other side. Fenwick walked by himself.

As they neared the buildings he spoke. His face was flushed and he hesitated.

"I—ah—I—ah—I'm sorry about that back there," he managed to get out. "I lost my head for a moment."

Celia looked at him coldly: "It's not necessary to explain, Fenwick. We understand." She made the word "Fenwick" very explicit.

"Don't worry about it, Fenwick," Bill said tolerantly. "We're not going to say a word—just let the matter drop."

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Miserably Fenwick turned away. He knew he was through with Celia.

"I'll leave in the morning," he said. That closed the conversation with him.

The other members of the parties were back at the lab comparing notes.

"I think we've gotten most of them." Brandon said at last. "But we'll keep at it until we're certain. I'm going to contact the Academy of Science tomorrow morning."

"Dr. Brandon," Bill said, "I'd suggest you do more than that. You know better than I the dangers that exist with this sort of thing. This area must be combed inch by square inch, on foot and by helicopter to make certain that not one of the monsters is still alive."

Brandon was thoughtful; "I'm not deluding myself. I know how close I came to releasing an uncontrollable force on the world," he admitted. I'm going to make every possible effort to rectify the error. I'll keep this land and the surrounding land under constant surveillance so that there isn't the remotest chance of any of the insects getting away."

"All right, everybody," Bill said, "let's get some sleep. There's work to do tomorrow." He turned toward the silent Fenwick. "And don't forget, you're leaving early tomorrow—right?"

Fenwick nodded.

Dr. Brandon looked surprised: "What's the matter John? I thought you and Celia—"

"There have been some changes." Celia said, "some important changes." She looked at Bill and smiled. Then she took his arm and they walked into the offices.

The puzzled look disappeared from Brandon's face. He shook his head ruefully. "Yes," he said, "there have been some terrible changes..."

"Are we going anywhere, Bill?" Celia asked smilingly.

"No," Bill said, "as much as I'd like to, we're not going anywhere until we're positive. The 'biological barrier' isn't good enough for me. Are you going to stay here with me?"

"I'm planning to stay with you a long time, Bill," Celia said.

Bill Clinton bent down, took her in his arms and whispered against her ear, "Gee, honey, I'm glad I'm an engineer!"

THE END

BUILD A BOMB!

★ By JUNE LURIE ★

IT IS GENERALLY conceded that Americans are people who like to do things by and for themselves without the intermediary of a factory or a shop. Thumb through any magazines today and you will find advertisements suggesting the reader construct himself a boat, a car, a radio or what have you, from plans supplied by the advertiser. Probably the only reason an ad hasn't appeared suggesting the reader build himself an atomic bomb is because "the plans aren't availabe." But don't be surprised if somebody does come along with such an idea.

While it's something to laugh about, the habit of Americans doing things for themselves is also something to be proud of. This magazine has often discussed the roles played by amateurs in scientific activities ranging from the hams in radio to the amateur telescope makers. It is a source of strength for our country as witness the roles played by these same amateurs in the very serious business of war. Even today, along lines only dreamt of a short while ago, there are amateur "rocket societies," the function of which is to encourage the development of the rocket for the eventual use of space travel—but which also include such things as actually experimenting with rocket motors! Unbelievable but true!

The author has had occasion to survey numerous magazines in the radio field and

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

has been pleasantly surprised by the host of kits offered to the experimentor. As a matter of fact, a discussion of such kits in the television field brought an over-whelmingly curious response from you readers wanting to know where such kits could be obtained.

This is a healthy sign. Among the many kits offered in the radio field alone, are dozens of different units designed to enable the amateur constructor to build his own radio and TV test equipment for surprisingly reasonable sums. Complex scientific instruments like vacuum tube voltmeters, oscilloscopes, condensor and resistor bridge-type checkers, can all be obtained from various outfits for sums approximating half their ordinary value. These instruments come ready to build requiring only assembling and wiring using tools like pliers and soldering irons.

As a matter of personal experience the author constructed several of these kits and was amazed by their performance. The vacuum tube voltmeter, for example proved to be an efficient accurate useful instrument.

We are now waiting for some builder to offer a rocket kit. When the ads say: "Why wait? Build your own rocket to the Moon!" we are going to be the first to reply: It's too good to miss. Or maybe someone will say again: "Why wait? Build your own atomic bomb!" and again we'll jump in the breach.

Seriously though, many thousands of amateur scientists are being helped by this tremendous availability of quality equipment. It is possible that the training afforded by such material may eventually be reflected in the future history of our country. It takes only a small beginning, you know. Who knows what Steinmetz right now is painstakingly building a radio transmitter for experience's sake?

THE END

"BRAIN" MACHINES

★ By WALTER LATHROP ★

THE LAST few months have seen tremendous strides taken in the development of automatic calculating machines, machines like Eniac, Maniac, etc. Computers for every purpose are being built in large numbers. These calculating machines are the complex assemblies of radio tubes and relays made so famous by their work on abstruse calculations for the atomic bomb, for astronomy, and for guided missiles work, not the multitude of smaller calculators so common in business and industry.

Various scientists have pointed out that these machines are truly miraculous; the time is to come when they will assume many functions of the human brain. Dr. Wiener, in his famous work on cybernetics has predicted that eventually the mechanical brain will be able to do most routine tasks better and more efficiently than a human brain. As it is, the machine brains now do work impossible to the human brain.

This naturally leads to the question—which is better?—although in many respects such a question is ridiculous. However for the purposes of discussion it is interesting to make some comparison with the human brain and the mechanical brain.

To begin with, the mechanical brains or calculators cannot even approach, in efficiency, the human brain. Mechanical brains require vast numbers of radio tubes which give off huge amounts of heat. This heat must be carried away by blasts of air from fans. An enormous quantity of energy is used just keeping a mechanical brain cool! The human brain on the other hand is so remarkably efficient that the blood leaving it is only a fraction of a degree higher in temperature than that entering it.

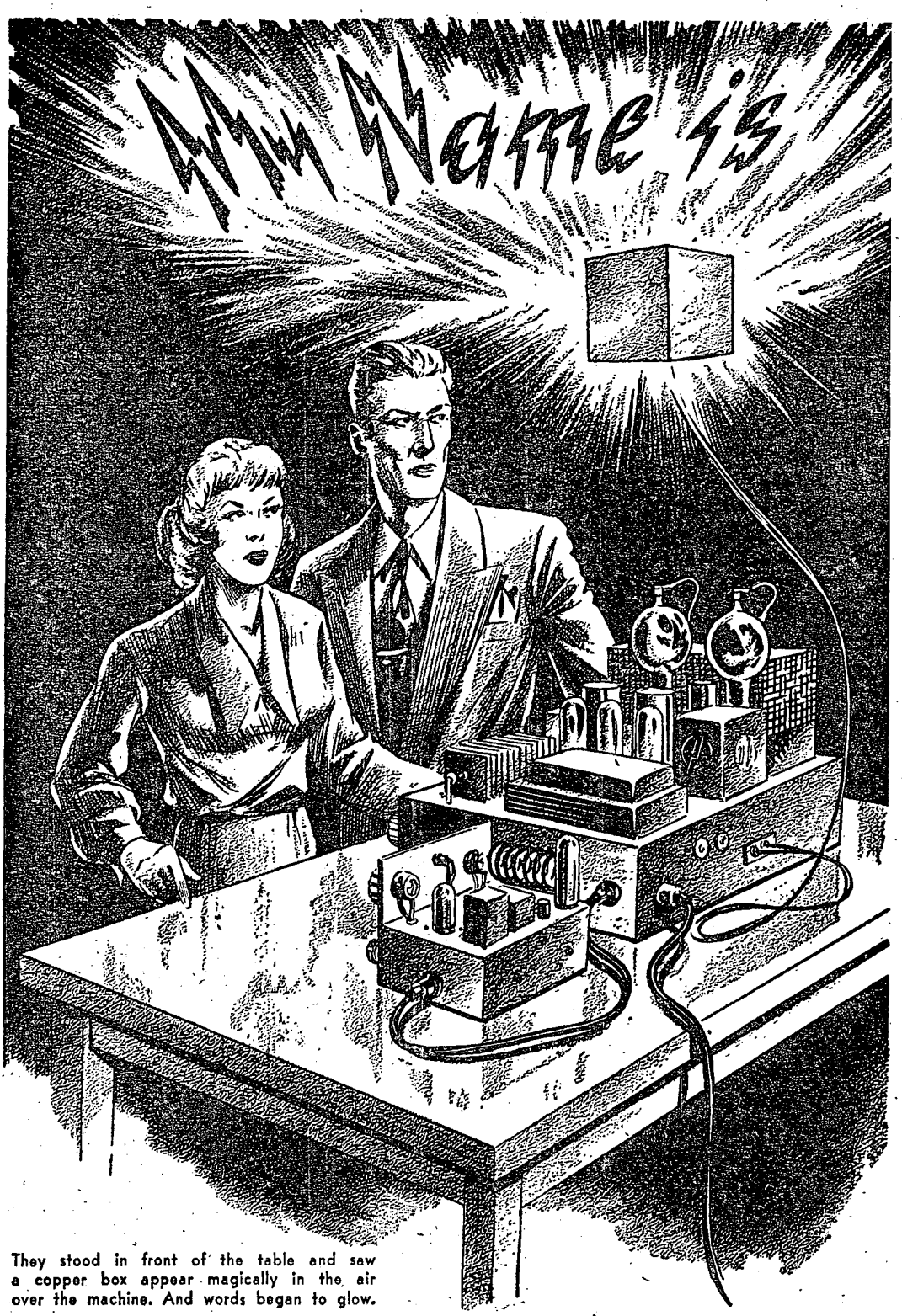
Also of interest is the fact that a mechanical brain is the highest type of simplicity compared with a human brain. The latter has so many billion cells, that it makes the thousands of tubes and relays of the machine look like a child's toy. And above all, of course is the fact that the mechanical brain is capable of only a limited range of problems. In fact, it is in many ways to be regarded as stupid for a gigantic amount of time is necessary simply to formulate a problem for the brain even though the solution may be ground out in a matter of seconds or minutes.

Thus when we take an overall look at mechanical and human brains no matter how rosy the future looks, there appears little likelihood that the former will replace the latter. However we shall still see more and more computers come into use because they can solve certain problems which the human brain can't and they can do it so rapidly that it is amazing.

Fire-control problems in gunnery and guided missiles will find the mechanical brain a godsend, a necessity, but thinking creatively requires more than a mass of relays. That little old "gray matter" is still king when it comes to thinking.

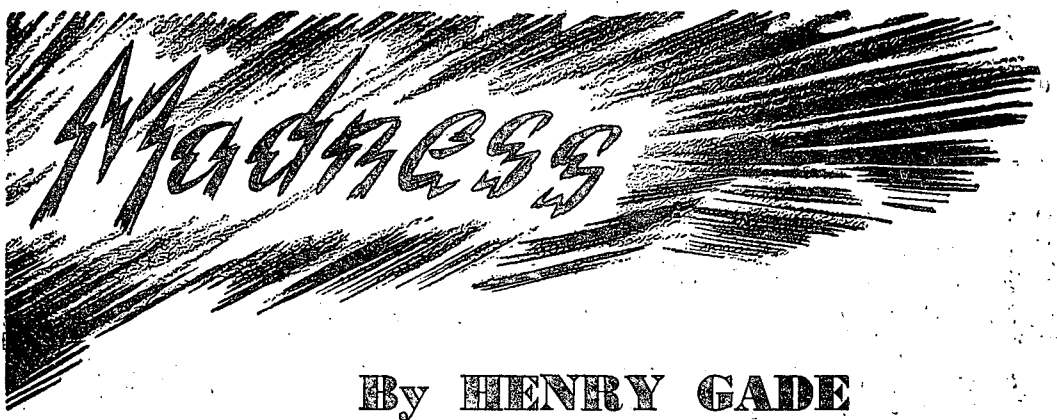
Maybe with its dispassionate approach however a mechanical brain might be able to give a rational answer to problems outside its field and which the human brain always flubs, problems, for example like—what is love?—what is life? And don't ask how the data to answer such problems can be put into a mechanical brain!

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED



They stood in front of the table and saw a copper box appear magically in the air over the machine. And words began to glow.

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED



By HENRY GADE

There was something very peculiar about the machine; it seemed to possess a strange power — that could drive a man mad. . .

IT IS with a strange mixture of misgivings, doubts, and desires to present perhaps the most bizarre mystery of my experience, that I compose this introduction. Misgivings, because as I write I am painfully conscious of the fact that in an institution not far removed from here there are four lonely cells containing four creatures who were once my friends. Creatures who were once human, alive, and interested in the things that interest me.

They saw the meaning behind this account that eludes me. And seeing it they went mad. Perhaps not mad in the usual sense. Mindless is a more accurate term to apply to their present state. I have seen them in their solitary cells. Their eyes stare vacantly and unblinking. They have to be fed. And they have to be changed like babies.

And with a strange, compelling fascination I am drawn to re-examine the series of events that led up to their present state; hope that I can discover the cause and return them to sanity struggling with dread that IF I find that strange, hidden Thing that detroyed their reason, I, too, will go mad and join them.

I was present when they went mad. I saw the same things they saw, and heard the same things they heard,—with the exception of one thing. It was a Name, inscribed in some strange, meaningless (to me) script, in lines of yellow, eerie light on a table top, by an instrument that could not possibly write, yet it did; controlled through a strange receiving set that could not possibly receive anything, yet it did; controlled by a strange creature who can not possibly exist, yet must.

It is only the certainty that what drove them mad was contained in that Name, that Name which was meaningless to me and of a form that would not register on the memory, but become vague and impossible to reproduce the moment my eyes turned away from it, and that Name is beyond the reach of the reader's eyes, and hence powerless to drive HIM mad, that enables me to set down the occurrences leading up to its appearance.

In my mind is a photographic picture of every detail of the scene on that dreadful night. My four friends

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

and I standing around a table upon which rested a strange radio with leads going out to a vacant, undulating space a foot above the table. In that space was a strangely shaped copper box. But it was not visible. I knew its shape. Indeed, I had built it. Built it under the direction of wordless inspiration, following that inspiration in a mood of half humorous, half curious tolerance, and ignoring the logic which showed me it WOULD NOT WORK. And each time I told myself it would not work, a strange echo from the depths of my subconscious mind, from whence the inspiration seemed to come, whispered "in your time."

And in my mind is a vivid picture of John placing his receiving cap on the table at the direction of the mad, nameless thing, and then lifting it to reveal the Name, written in lines of light. The Name that drove him and Dorothy and Claude and Arthur mad.

I can see them as they looked at it. First they were puzzled, then an expression of startled amazement spread over their faces. Then—but perhaps I had better start at the beginning. There may be a clue that I have missed. A clue which some reader may discover, and discovering, be the means of restoring the sanity of four people who are very dear to me, and for whom I feel a sense of responsibility; for if I had not listened to that Voice and built that machine they would be today still four normal, happy friends.

IN THE winter of nineteen forty-five and six I began a series of experiments, in the field of electronics, which I hoped would lead to a machine for aiding thought transference. I began these experiments with the utmost confidence in their eventual success, for I had the whole principal of the process quite clear in my mind.

I will not divulge their nature here because, as is common of the things that are to come in the way of inventions and discoveries, the elements of the Wholes are already common knowledge to the layman, and if I were to give the machine I eventually built the name it properly deserves, nine tenths of the readers could immediately discern its principle, go to any department store and buy a few odds and ends, and construct a fairly workable machine of the same type.

The principle of operation of the machine has little to do with the mystery which the machine uncovered. The part which was the essential "key" to contacting this mystery, if it were possible for the human intellect to fathom its functions, MIGHT show whether the Source contacted was in reality from a time in the distant future, when this planet is to become a barren waste of vast acres of cracked and crumbling concrete terrain, dotted here and there by ugly-beautiful, deserted cities, and Man has at last become one, lonely individual, brooding in his solitary cubicle; or whether the Source contacted was the Mass Consciousness of humanity in the present. A Mass Consciousness aware of its own identity and able to logically study Its future in succeeding centuries and foresee Its doom.

The latter, though as incomprehensible as the former, seems the likelier theory, because the whole Mystery seems to have been propounded as a problem to be solved rather than a senseless exhibition of what IS and WAS and cannot be altered.

If the Mystery is a problem propounded by the mass ego of humanity to some of its members in the hope that they might find a solution, events show that the solution is unobtain-

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

able, because the four who were able to "see" the statement of the problem were unable to retain their reason.

But all that is speculation, because I, who saw the same physical things they saw, was not able to "see" what drove them mad, to become mindless creatures,—incurable, forever bereft of reason and unable to perform the simplest body functions with any sign of awareness.

It would be too far fetched to say they saw, simply, the statement of a problem. It is much more likely that they saw an inexorable Doom to which the race was condemned, and in particular *they themselves*. And yet, there must have been a motive for their being shown this nameless, wordless,—the nearest word that could describe it would be "thought-o-graph". For, to each, it was something different.

To me it was merely a senseless scrawl in lines of yellow light on the varnished surface of a table, and when I returned to examine it more closely after the press of urgent action was over, it had vanished, leaving no slightest trace that it had ever been there. Even the fine layer of dust over which it had lain was undisturbed.

And when I again turned the switch which should have caused that curious copper box to vanish, and be replaced by a tenuous, undulating Space, nothing happened. I have only the four, mindless witnesses whose very senselessness is evidence that it *did* work, and my imperfect memories of the details of what happened, and what we saw and heard, to show that it really did happen. In a way I am glad that is all I have to prove the truth of this account, for who knows what terror might be revealed, what madness let loose among men, if there were more?

IT WAS around eleven o'clock on a Saturday night in October, of last year. Dinner was a forgotten thing of the past and already the pangs of mild hunger were beginning to reassert themselves.

Several rounds of Pinochle were also behind us and our collective interest had switched to conversation. It was a customary gathering of close friends; Claude Walker, who worked in my research laboratory, and his wife, Mary; John and Dorothy Denning, who usually were not present because it was hard to find someone to stay with their two little girls; Arthur Davis and his wife, and, of course, my wife, Eleanor, and myself.

I recall the scene quite vividly. Arthur, John, and Dorothy, slouched down on the davenport, Mrs. Davis sitting erect and prim in the antique chair, Claude with a kitchen chair turned backwards, his legs spread and his arms resting on the chair back, Mary sitting crosslegged on the rug before the cobblestone fireplace, and Eleanor in the kitchen getting some coffee started. I was scooted down in my easy chair,—the mate to the davenport.

I can't remember what we had been talking about before, but during a lull in the conversation Arthur asked, "What about that gadget you've been working on? The one that's supposed to augment telepathic exchange."

Instead of answering, I looked questioningly at Claude. He was to have put the finishing touches on it that day and I had not asked him yet if he had done so.

He ducked his head slightly and cleared his throat nervously. I nodded for him to speak, and he said, "All done. I tested out the circuit, but of course I couldn't tell whether it works or not yet. It takes two to do that."

"Suppose we bring it in the house,"

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

I suggested. "It would be fun to see if it really works."

There were enthusiastic exclamations of approval, so it was brought in. It consisted of two, peculiar looking caps with nobs projecting from them at various angles, a flexible cable from each cap leading into a box very much like a table radio.

Everyone wanted to be first to try it, then suddenly decided he didn't want to be first because something unforeseen might happen. Finally Claude and I donned the caps and turned the switch on. In a moment the tubes lit up.

Nothing seemed to happen for some time. Then suddenly I became aware that some of my thoughts seemed to be much stronger than others. So much stronger that they seemed to take on the same quality of independence as the image of some objects in the room, or the sound of someone's voice.

I thought to myself, "I will take out my pen and pocket notebook." Suiting my actions to my thoughts I did so. At the same time Claude did the same thing.

We paused in the middle of the act, looked at each other, then laughed triumphantly. The machine was a success!

For hours we all experimented with it. Everyone eventually worked up enough courage to put on one of the strange helmets and experience the strange phenomenon of direct thought transferrence. We devised test experiments on the spur of the moment. One person would silently read a passage from a book while the other wrote down what he thought. The telepathic transfer of thought was perfect and complete in every case.

IT WAS during an interval when I had a helmet on and the other was being handed by Mary to Eleanor that the first inspirational hint of what was to be the strange copper box came to me.

It came as a completed concept, instantaneously, with a strange overtone of meanings. One of the subtle background elements was the impression that the thought had come over a vast distance. A distance greater than any conceivable spatial distance of mere extent. But the entire thought was so vague in meaning, and the visual part so strange that my memory could not retain it accurately.

I dismissed it as some freak impression on the other cap, caused, no doubt by the warmth or nerve impulse of Eleanor's or Mary's hand as it was grasped during the transfer, and promptly forgot about it.

The mantel clock chimed three melodious notes as Eleanor and I said goodnight to our last guest and closed the door. None of us had expected to be able to sleep that night. We had seen the birth of a new industry and a new instrument by which the race could make one more step forward. Perhaps a longer step than it had made with the aeroplane or the radio. Perhaps a longer stride toward the perfect man than all other inventions put together!

But as we closed the door on our last guest the excitement of the evening exacted its toll. With heavy lids we soon climbed into bed and I at least, was asleep before my head hit the pillow.

In my sleep that errant thought complex returned to haunt my dreams. I tried to pin it down, to focus my attention on some concrete detail of it. But each time, just as my mind's eye was about to bring some part into sharp focus, the whole thing would recede, just beyond reach.

In the days that followed that thought returned continually to haunt

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

me. There was something—

I began to experiment with the machine, trying to capture that thought again. Donning one cap I would dangle the other in the air and listen to my thoughts. I even took it into the living room where it had been before and tried to duplicate the conditions that had existed when I first received the thought. All without success.

Finally I gave up and dismissed the whole thing from my mind. Whatever it was, there was no hope of recapturing it. I threw myself into the plans for manufacturing the telepathic augmentor. A slight change in shape here, a simplification there, and the order in which the parts go together; those are the steps in the master production, or rather the design half of the problem.

The other half of the problem is to fit the manufacture of the thing into a complex of a floor plan of benches, drills, endless belts, storage rooms, special machine tools, and the intelligent, ten tentacled tool called the worker.

There is a fascination in working a problem in manufacturing. It is a problem that calls up all the skill and knowledge the race has achieved. Art, to make the product please the future customer's eye; psychology, to make the personnel enjoy its part in the functioning of the manufacturing machine, and timing, and location of the manufacturing steps on a floor plan to agree with the time scheme.

Christmas soon crept up over the horizon, and made its annual demands. Eleanor and I have no children of our own, but we have my four sister's total of seven children to buy presents for, and in addition a half dozen children of friends; all of them in the rapidly changing age which demands an utterly new kind of present each year to fit their new interests or potential interests.

TRYING to decide whether Judy can do with another doll this year, whether Rowland Jr. is still too young to have grown-up presents, whether Linda Jane has outgrown the child book stage, etc., takes a lot of wandering through department stores and discussion.

It was in The Bonne Marche, while I was gazing absently at a display of women's hats, that the strange feeling first experienced itself. Some shape in that collection of monstrosities brought back that thought that had so successfully eluded me.

For an hour I carefully examined hat after hat, trying to determine just which one had done it, while my wife grew impatient, pleaded, cajoled, and finally promised to go bareheaded the rest of her life if I would only stop my silly act of pretending to be fascinated by women's hats.

I was too engrossed in my study of the elements of shape of the hats to be aware of her pleadings, or of the amused glances of the clerks and other customers. I even put those elements of shape together in different forms, designing, perhaps, all of next year's hat styles in my mind, on the off chance that it was not an actual shape of one of the hats, but a composite of shape elements of several of them that rearroused that elusive thought.

And all the while a vague, undefinable feeling grew in me that I could build the thing hinted at in that errant thought without recapturing it. Finally that feeling settled on three outrageous things and I bought them. In Eleanor's size, of course.

The day's shopping tour was shot. The stores were all closing, and my wife's temper was also shot. And it did not improve after we arrived home when I took the hats out to the

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

lab instead of giving them to her.

We had been married a long time, however, and alone, in the kitchen, preparing the dinner, she finally came to the right conclusion. I was on the trail of another concept which would lead to another startling gadget. So it was with agreeable surprise that I found her in a pleasant, philosophical mood when she finally dragged me in to dinner.

I reciprocated by shelving the whole thing until the Christmas shopping was completed. Then, on December twenty-third, I put the tin snips to the first sheet of copper and started to build—what? I didn't know. I didn't even know what function it would have. Yet I started to build it.

I was like a poet trying to make words rhyme without having an overall concept to fit my poem into. I was like an author trying to write a story without some plot in the background. My sense of humor carried me through. Cutting a sheet of copper, and bending it to fit some other piece, I would look at it and see if it "felt" right.

More often than not it didn't "feel" right. Yet in two days,—thirty-two hours, of this, I had something which began to disturb my emotions remarkably. And strangely enough, when I compared it with the three hats, I found that it was indeed a composite of elements of shape from all three! And I felt that I no longer needed them, so I presented them to Eleanor that evening as an additional Christmas present. As I look back I realize that if I hadn't I would have been divorced by New Years.

ON THE morning of December twenty-sixth I began the serious task of determining just what the copper box was to do. Outwardly it was shaped like a large size tin can, closed at both ends by removable covers, but with a series of alternating broad and narrow bands about its circumference. These were all of varying width and no two were spaced the same distance apart.

Inwardly the thing was a mad geometrician's nightmare. Spirals of narrow copper sheeting were mixed in with copper bands and even leaf shaped pieces of sheeting. All was of copper except one piece,—a wire of soft steel, shaped like the handle of a bucket, and set into the heart of the mad concoction with insulating glue.

The nightmarish core was insulated from the container with small porcelain pegs. A wire led from this core through a hole in the container, a second wire was hooked onto the container, and the two led to a plug which would fit into the panel of the telepathic augmentor.

The thing could not possibly work, because the wire from the container was to be grounded. This meant the core could not possibly be affected by an impulse that would be amplifiable by the telepathic augmentor! And yet, here I was, a supposedly sane, self-styled inventor and scientist, stealing designs from women's hats to make a gadget which couldn't work, and seriously making plans to test it out! Why?

Since it did work, as later developments were to prove, the only tenable theory is that the intelligence we later contacted had implanted in my mind during that instant when the telepathy cap was in mid air a complex of thought which would soon lead to my building the gadget so that I could make positive contact with mortals over sustained periods of time.

This theory contains startling implications. It implies that the Thing knew every ramification of my mind or else the complex it implanted was of such a nature that it would bring

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

the desired results in the form of the completed gadget regardless of my mental makeup. It implies that the Thing knew my immediate future in exact detail; that, to be specific, I would go into the department store and see a certain display to be made, and then to cause me to see it and pick out three which were to serve as models for the gadgets. But if this latter were the case it seems a rather roundabout method, for with the power to do this the Thing would or should be able to guide me directly and surely without the happy accident of a hat display.

For myself I am inclined to believe that the Intelligence we were to contact knew the future as surely as we know the immediate past, and must therefore lie in the future. But since this does not tie in with the certainty that the future cannot contact the present and alter it, that the fundamental nature of reality does not include this possibility. The Intelligence must have been of such tremendous mental development that it could accurately tell the future just as a gunner can tell where his bullet will strike after he pulls the trigger. This implies that the mentality of the Thing included the mentality of the hat designer, the clerk who put together the display, my own mind, and that of all concerned, and must therefore have been the Mass Mind of the race or at least of some part of it. And that this Mass Consciousness has a self awareness and can function as a self-conscious Unit!

My reasoning may be completely at fault and is doubtless colored considerably by subsequent events which will become known to the reader as he continues this narrative. Yet I think it important that I put it down, so that it can can form a part of the evidence of the mystery I am trying to describe.

I am beginning to have a vague suspicion as I continue this composition that—. I must think it over. It is so utterly mad that I hesitate to even express it in my own mind.

THE SCENE in my laboratory before I plugged the gadget into the telepathic augmentor stands out clearly in my mind like the unnatural calm before a terrific storm, when even the birds are stilled and the leaves of the trees hang motionless and almost lifeless, and the air itself seems to exude a light of its own that makes the landscape stand out in unnatural sharpness and clarity.

Claude and I had been examining my latest "brain child" as he called the mysterious gadget, and deciding whether we should plug it in and see what would happen.

Suddenly I laid it down and walked over to the door. Consciously I had heard nothing. The lab was soundproofed. Yet I KNEW that Jack and Dorothy and Arthur were there, about to knock. And as I put my hand to the knob of the door the knock came.

Opening the door I smiled and invited them in. In that instant I KNEW the gadget would work. I knew they had each had a sudden URGE to come over. Questioning brought this out in verification of my subconscious knowledge.

In fact, they were laughing over the strange coincidence that had brought Arthur over at the same time as the Dennings, although they lived in different parts of town and had not known of their simultaneous urge until they almost had a collision at the foot of the hill in their haste to arrive as quickly as possible.

And Dorothy confessed that when Jack had suggested coming over to

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

my lab she had said, "Let's go right now", and left the dishes in the sink partly done.

"Well, now that you're here," I began. Then I hesitated. Some vague presentiment stirred within me. If I had only listened to that subconscious warning and chucked the whole thing in the trash can! But I knew it was a psychological impossibility for me to have spent so much time building the queer copper can and then throw it away without verifying the certain fact that it couldn't work.

I plugged it in to the telepathic augmentor in place of one of the caps, and plugged in the box which was designed to function on the telepathy scale the same as the ordinary loudspeaker does on the audible scale. Then I turned the switch that sent current through the tubes.

We were all watching the queer can, perched on a wooden frame about a foot off the lab table. As I watched, something seemed to take place that sent a shaft of pain from my eyes into my brain. In the instant it happened it was over, and there where the copper can had been was nothing. Nothing and yet something. Something beyond vision. A queer undulation that seemed to be more than three dimensional, yet did not distort the part of the lab wall that could be seen through it.

Then a toneless, though seemingly audible "voice" spoke, saying, "Find chairs, relax, and listen, and watch."

We looked at one another in surprise. Then remembering there were a dozen folding chairs in a closet of the lab, I dragged them out. Until we were seated there was no sound from the augmentor, but as soon as we were comfortably relaxed the "voice" continued.

"You are naturally curious, as to who or what I am, who speak to you in such strange, impossible manner. I must, for reasons, which will later become apparent, forego introducing myself, until I have first carried you, on a journey.

"Time, as you see it, is short for me. I must condense, into a few brief hours, the lifetime of a planet, and a face. I must give you, highlights. Highlights, and highlights.

"Toward the end, you will see, a specific happening, to specific people."

I HAVE tried to reproduce the exact words and tone, as nearly as possible, of the unknown intelligence's message. It came in short spurts. The commas might more exactly be dashes. The voice had no audible tones. It was impossible to tell whether it was a bass voice or a soprano. It carried a quality of deliberate and ponderous thoughts. It seemed to demand and compel attention.

"First, we will go back, to the dawn, of life, on this planet," it concluded.

Slowly the lab faded from view. In its place appeared the vastness of interstellar space. I seemed to be suspended motionless, without body, aware only of the silent drama my eyes brought to mind.

A huge, cold globe with a single satellite was plunging toward a hot sun. I seemed to know it would miss and after plunging close to the sun's fiery photosphere go back into the interstellar void from whence it came.

But as it started its outward journey white flashes suddenly dotted its dark surface and that of its satellite. Only for an instant, yet they left glowing pools on the two surfaces.

The dark globe seemed to pause, then continue on its slow and lonely journey. Almost it seemed to hesitate about forsaking this warm, living sun.

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Slower and slower it went, until finally it turned back and again circled the hot sun. And again there were specks of white light dotting its surface, leaving glowing pools as they died down.

And a voice seemed to whisper in my mind, "This is to be the earth, and the white flashes are ice asteroids which are to form its oceans. As the planet cuts through the asteroid belt time after time it will slow down and assume a steady orbit. It's frozen gasses will once again melt and form a blanket. But its companion has no frozen gasses and the captured water will evaporate and go away into space, leaving the scars made by the icy fragments as mute proofs of this happening."

Then I became aware that it was no whisper, but the voice of the unknown speaker. It continued. "From a far place in space has come this Earth. Young and yet incredibly old. In its inner rocky vaults once lived a race of mighty warriors. And in the layers of sandstone and lime near its surface are relics of its former splendor. Bones of giant creatures that roamed its surface countless years ago under another sun. Vast layers of forest growth that have turned into black bassalt or coal as the billions of years passed during its lonely journey through space, untouched by time, and frozen.

"And now it is to live again! The spores of forgotten life forms will spring into life. The icy asteroids will form mighty oceans which will lick the wounds of this ancient world with lapping waves and gentle rains, until there is no trace of the scars that will remain only on its circling moon."

"There will be no mighty reptiles. They *were* but cannot be here. Yet in hidden cracks are small things, frozen for almost an eternity, which will sire the races of creatures that are to struggle for possession of this choice planet."

While the "voice" spoke we were transported to a place midway between the Earth and the moon. From our new vantage point we could see the large, billowing clouds of steam and evaporating gasses, shooting thousands of miles into space, to be pulled back toward the surface, the moisture congealing into snow and rain which bathed the Earth's surface.

While from the moon the tendrils of white steam kept on going until the scintillating, rainbow hued billows of ice crystals were lost to view in the blackness of space. Her gravitational field was not strong enough to pull back the clouds of freezing water which had shot up at escape velocity.

IT SEEMED we were actually there, instead of sitting in my lab before a strange machine beside which floated a strange warp in—what? Time? Space? What manner of transformation had occurred to that copper can? And who or what was the unhuman thing that had inspired it, and now had carried us back to the beginning of our planet's history?

And what a history! I knew, of course, all the theories as to the origin of the earth. This was something utterly unguessed. And yet, the more I thought of it the more obvious it seemed. The mystery of the sudden end of the giant reptiles. According to what we were seeing they must have been wiped out by the planet leaving that unknown former sun millions and billions of years before!

And the craters on the moon. How logical and natural this picture was! And the plowing through an asteroid belt of ice blocks. Each time the momentum of the binary wanderer was

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

cut down. The first time it plowed through, its escape velocity from the sun was killed, trapping it forever.

The large oceans, containing more water than any planet could or should have ordinarily. Mars, from which no water vapor could escape, did not have enough water for oceans. There was not enough hydrogen in the sun's photosphere to form large oceans of water if the sun were to cool.

And as though reading my thoughts the "voice" said, "Out in space the water molecules slowly crystalize into large blocks of ice, just as in a saturated salt solution allowed to evaporate slowly large salt crystals of chemically pure salts segregate out of the solution. In this way the asteroid belt was formed through which the Earth plowed time after time."

I thought of the thousands of meteorites in museums, composed of pure iron. Were they not chemically pure crystals of the same sort, crystalized out of the etheic solution of all sorts of substances by the same principle?

My thoughts were wrenched back to the scene below us. We were now only a few thousand feet above the Earth's surface and large, billowing vapor clouds shot past us and around us, at times completely obscuring the landscape below.

Bleak, desolate, and without a familiar landmark, the terrain below sped past us. Huge moon craters had torn and wrenched the Earth's surface so thoroughly that only here and there was the surface intact.

As the fierce rays of the hot sun pored down on the frozen sheath of gasses covering these places, large cracks shot out in all directions followed by sharp peals as from giant cannons.

Titanic forces were running wild, and I was trying desperately to pierce the seething clouds and discover traces of some ancient ruins that might have been a city when our Earth circled that forgotten sun in the distant past.

Then, suddenly, the scene changed and we were looking at a new Earth. The maelstroms of steam and gas were gone. In their place were clouds, calmly floating above an almost familiar landscape.

I RECOGNIZED the giant redwoods that forested large sections of the land. The "voice" whispered, "These are the ancestors of all conifers. Through some whim of fate their seeds survived the journey from the distant star."

We were shown barren rocks on which stunted redwoods fought for bare existence, and in that fight they changed. Their needles lengthened and they became pines and firs.

But there were many other growths, and as we came close to the surface to examine them we saw many creatures scurrying about, all of them small and desperate looking.

The scene changed again. There were plants with leaves and a wealth of blooming planets. As we came to rest near some delightful meadow we watched strange creatures with large vacuous eyes and spiderlike arms and legs, each arm twice the length of the furry body.

They were busy turning over rocks and fallen logs, swiftly capturing the bugs brought to light and popping them in their weak looking, almost human mouths.

Dainty spiderlike infants clung to the backs and breasts of the females, some of them suckling while the mother continued her search for bugs unconcernedly.

I thought, "The ancestors of the modern monkey, no doubt."

The "voice" replied, "The ancestors

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

of Man. In fact, the first race of men."

I watched these queer creatures with increased interest. Suddenly I noticed that when one of them found a particularly rich haul of bugs under some rock he would take most of it and disappear into a nearby clumpet of bushes, reappearing shortly to continue his foraging; that not only one was doing this, but nearly every male in the tribe.

I became curious as to what attraction there could be hidden in the bushes. My curiosity seemed to shift the scene, so that in a moment I was myself entering the clumpet along the same path the males had taken. Shortly I entered a small clearing completely surrounded by impenetrable masses of thorny bushes.

Sitting on the ground were five females, each holding an infant. The females were exactly the same as those outside. The infants, however, extremely short arms and legs, as were utterly different. Hairless, with contrasted with the extreme length of those of the other; normal offspring of the race; their craniums were huge, top heavy globes, attached to a normal pair of eyes and a normal face.

The face, shoulders, and torso of the infants showed unmistakably their mothers' characteristics. The baldness of skin, atrophied looking arms and legs, and weighty brain, together with their evident helplessness, gave evidence of some alien blood or some strange mutation. *But what mutation could produce such consistent results?*

These babies were unmistakably human! The mothers were as unmistakably animal!

Again the scene shifted. I was looking at the outside of what appeared to be a village. It seemed to be in the center of a plain on which crops were growing in orderly rows. A high wall of closely spaced, bamboo-like logs surrounded it.

In the field women were cultivating the rows of strange plants. Women who wore skirts of woven grass, were white of skin, with long, black hair, extremely high forehead, and a look of almost superhuman intelligence in their eyes.

No words were exchanged among them, yet, from time to time they would laugh, grin at one another, and otherwise carry on as if a rapid fire conversation were going on by other means than speech.

I ENTERED the village through the gate, and for the first time saw the men. They were like the women except that the old ones had long black beards.

The village was shaped like a huge wheel. The outer wall was circular, and the thatched huts were laid out in circular rows around a central clearing. In the center of this clearing was a raised, table-like plot of ground, and sitting crosslegged on it were perhaps two dozen of these men, their eyes closed.

Their eyes were closed, yet they seemed more alive and awake than the others. There seemed to be some strange, almost supernatural power present among them.

I felt an overwhelming emotion of fear. Then abruptly I was jerked back to my real surroundings by the realization that this fear was not mine, nor yet that of those patriarchs of that tribe of strange humans, but belonged to the unknown "voice" that was showing us these things!

I stared speculatively at the space above the table where the copper can was still invisible. I glanced at my four companions who were still intent on what they were "seeing", oblivious of my return to the present.

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

My eyes returned to the table, and slowly the village reappeared, while the lab seemed to fade away.

Now began a swift series of brief scenes. The village vanished, to be replaced by one of these men embracing a female of the other, animal like race. Then came a repitition of the scene in the thicket, except that this time the strange babies were of red skin, and larger.

I saw a band of Indians, their males tall and strong, creeping up on a village of the white skinned race. They set fire to the village and carried away all the women, slaughtering the men unmercifully.

I saw a red skinned Indian in a love embrace with a female of the animal race. I again saw the scene of the thicket, and this time the babies were not quite human, yet still not animal, their skins black, eyes small, and unintelligent.

The dark opening to a cave in a dirt bank appeared, and squatted at the entrance was a repulsive looking black female, naked, and with streaks of brownish clay clinging to her body.

I saw whites, browns, blacks, and the spider-like animal creatures mating promiscuously among themselves and with other animals. I saw a nightmare progression of strange caricatures of every possible blend of man and brute.

My mind rocked at the blows to race pride as these scenes supplanted one another. It seemed an unearthly, mad symphony of horrors, played by an unknown musician on an instrument that gave out images and thoughts instead of notes and chords of tonal quality.

Then suddenly it was over. There was a sloping meadow at the foot of a snowcapped mountain, and a man whom I recognized as a true Neanderthal sat astride a horse, the two half asleep.

NEAR AND far the meadow was dotted by tamely grazing goats. As I watched, three others astride horses came up the slope. As they neared the sleeping herdsman their mouths opened, and although I heard nothing I was aware that they were shouting a greeting.

The scene vanished. And again the mad symphony began, but this time the scenes were familiar. Modern history gives them. Troy, Rome, the Norsemen, fierce looking warriors on fragile ships in the midst of the intercontinental oceans struggling to keep afloat.

I saw more than I had ever read of known history. More, perhaps, than *is* known. And more than I can remember. And yet, as the kaleidoscope of history developed, I had a feeling that it was all just a prelude; a prelude to something that was soon to appear before my eyes.

More than that, I had a feeling that something was being hidden. It had begun with that scene in the hub of that village. It had grown as each scene flashed before me. Something that was somehow vital to the picture, yet was not shown.

More than that, I had a feeling that this mad history of the planet and the race was too great to be the composition of one mind, even of one so great as the Unknown who was showing it. It seemed, rather, to be a production into which had gone the patient study and research of a whole race over many generations. It seemed too pat, too perfect in detail, and too real.

And the comments of the "voice" were more those of a lecturer than of a mind reviewing ad lib its knowledge of the past.

I thought of the modern movie costing hundreds of thousands of dol-

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

lars to make, which any man can see run off in an hour or two for the small sum of a fraction of a dollar. This was like those. Professional genius of hundreds of minds had gone into this. Technical research and scientific knowledge beyond that of the present generation had gone into it.

If it were actual time travel, assuming such a thing were possible, the particular scenes could not have been selected so perfectly, so that an adequate grasp of the whole panorama of human progress and development could be gained. Immense effort *must* have gone into it. Each scene was pared down to the minimum.

No, this was not mind to mind communication. This was machine to mind transference. And what a machine it must be, operated by that Unknown, from some unguessed place in time or space! And for what purpose? To give one day of entertainment to five casual onlookers? To "educate" five unimportant people beyond the scope of present knowledge?

Now I was on a stage. There were acres and acres of seats spreading out below, all filled with modern people in modern dress. Near me was a man, and on his head was a cap like the ones for my telephatic augmentor.

My gaze returning to the audience, I saw that each one there also wore one of the caps. In the front row I recognized my four friends, Jack, Dorothy, Claude, and Arthur. They were the same, yet there was something different about them. And instinctively I knew I was not in that audience.

Suddenly vast thoughts began to sweep through my mind, and I knew they came from that man beside me. It was a telepathic lecture over a perfected version of my telepathic augmentor!

IN MY MIND I "saw" the mystery of the Universe unfold. I "saw" into and beyond the Euclidean point, and saw that *in* it were distances that were relatively finite. I was swept upward and beheld distances and magnitudes so great that our vast universe that we study through giant telespcopes was no more than a point of no extent is to us.

I beheld a swarm of points of primal substance that darted in every direction at speeds thousands of times that of light. I knew it was the mysterious ether, the vehicle of fields of force. I saw it stretch interminably and endlessly. I beheld that there can be no limits to the extent of the real universe, that it goes on, and on, in all directions.

There grew in my mind a picture vaster than any picture I had ever beheld, of a Universe in balance, so that finity of time and space are dependent functions of reality; of a universe that had no beginning, and can never have an end, whose finite frames of reference change imperceptibly over infinite aeons of time, whose individual planets and suns form and grow, and eventually disappear, to be replaced by others, and these by still others.

A Universe whose intelligent races flourish for a moment and die, on planets that come, and vanish forever.

I "saw" equations in modern mathematical symbology which described exactly all the details of reality. I saw vast rooms with pygmy tables at which sat men scribbling equations which told them every detail of existence. I "saw" huge rooms with strange, infinitely complex masses of wiring and knobs connected to writing machines which were scribbling equations, while men stood around and studied what was written, gravely.

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

I saw vast libraries of books covered with dust, the corridors silent as tombs. I read the titles. They were our modern textbooks and theories. And with my new knowledge I saw how pathetically wrong our science had been, with its grandiose imaginings of n-dimensional space and time continuums, warped Space and "fundamental" fields of force.

My mind rocked on its foundations of sanity as I beheld the Whole of reality. I saw the mystery of life unfold and beheld its principle. I saw the beginnings of life on a planet, and its duplication in vast laboratories. I saw the processes of evolution, and books that told the Whole of nature.

And I saw the man of the future. A man to whom there can be only *one* unknowable. A man who knows the whole of nature and beholds the universe as it really is.

"I was carried out into space and watched the formation of tiny granules of gold, of copper, of ice, and of every known substance. I watched them grow as crystals in a saturated solution, grow, until they were giant asteroids drifting in space.

I saw them plunge into the atmospheres of suns and planets to become ore deposits, oxidized over centuries, eroded by wind and wave, covered up by volcanic flows, impenetrated by sulfurous, consuming vapors and liquids which changed them from the pure things they had been in space to ore beds of mineral based deposits. The mystery of ore deposits and their geographical distribution was solved! I remembered the asteroids that captured the Earth and saw that many of those asteroids must have been of different metals. I remembered the display of meteors I had seen in the museum in Chicago, with the polished sectional cuts showing their pure composition and strange lines denoting slow crystalization.

I SAW THE impossibility of these strange visitors from space being broken fragments of disrupted planets. The impossibility of a five hundred pound chunk of chemically pure iron from outer space being formed originally in any other way than slow crystalization by accumulation of the atoms of iron drifting in outer space itself. The impossibility of a huge deposite of iron ore being any place on the surface of the earth if we were to postulate that it separated out of a homogenous mixture of molten substances as the earth solidified. That they *had* to be the time worn, eroded remains of huge meteorites, asteroids that had plunged down from space to strike the earth's surface.

I was carried to the interior of a molten sun. There, in its core, I saw the synthesis of gigantic atoms, far higher in the atomic scale than Uranium. I followed these atoms as they drifted in the fluid body outward toward the surface. In blinding flashes I saw them disrupt to form unknown elements and release energy which kept the whole body in the molten state. I saw some of these atoms fly outward, leaving the sun, to drift through space. I saw that others remained, to slowly drift back toward the central core where they again combined into giant atoms which once again drifted toward the surface.

I perceived that a sun was a giant, fluid Whole, in perfect balance in its processes of synthesis and disruption.

Then I saw a giant, cold star, far larger than our own sun. I saw in it the arrested process of synthesis and disruption. I saw a huge planet plunge to its surface and penetrate far into the interior, the heat of its passage melting the layers upon layers of

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

accumulated matter that it had slowly gathered through billions of centuries. I saw the synthesis-disintegration cycle begin in this molten shaft, to spread over the whole star.

In a few hours the whole sun was molten, the unbalanced cycle unloosing unimaginable quantities of disintegrating matter and sending fiery shafts billions of miles into space.

The blasts of radiant energy, as billions of tons of atoms thousands of times heavier than Uranium came out of the previously imprisoned core and disintegrated, shot through space at light velocity, scorching everything in their path for thousands of billions of miles.

Five hundred years later, five hundred light years distant, some astronomer on some planet would view this event through a telescope and puzzle over the birth of a new Nova in the heavens.

And in this disintegrative phase of a sun's activity I saw the source of the atoms drifting in space that congealed out of the etheic solution into asteroids of pure substance!

Suddenly it was over and I was again in the giant theatre where acres upon acres of spectators sat quietly in their seats. The lecturer had finished.

"This," I thought, "is the beginnings of what will eventually be just as what I am now receiving over my clumsily made instrument, in my own laboratory. How far in the future is that copper can I made from women's hat forms reaching, to contact this drama?"

An enigmatical "Yes" was the only answer to my question. And yet, I *still* had the feeling that all this was just a prelude to something that was to come.

I had seen the origin of the Earth, the history of Man from beginnings down to the present. I had glimpsed Man in the future, and seen the mysteries of the Universe unfold before my eyes. Yet it was all just a prelude to something greater! And in it all was something that was hidden. Something I was seeing and yet not realizing that I saw. Something I *still* cannot see.

Abruptly a new scene appeared. A man and a woman were walking along a sidewalk made of some soft white substance that gave noticeably under the pressure of their feet. They were talking.

"BUT FRED, darling," the woman was saying, "How can you talk that way? You know very well we must go through with it. If we don't it will mean we will be put in the working group for six months and then on probation for two years. During the probation period we would be assigned only routine study, with no time or facilities for private research."

"I know," Fred replied. "But, Jannet, you know what has happened to the others who went through with it. They stayed there. They went in as observers and stayed as permanent guests. That would be even worse than six months of common labor and two years on probation!"

"But you know as well as I do," Jannet continued her argument, "that the sentence would not forever stay our having to go through with it. When the probation period was over we would again have to face it. They would again tell us to go,—or else."

A look of hopelessness appeared on Fred's face. "I know," he said hopelessly. "We live in a free country. Free, except for the little file of your life they keep which forever dictates what you must do. If you don't do it you can always become a worker for six months with a two year probation period. Then you are

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

again offered the same choice."

Jannet took his hand and looked at him pityingly. She loved this over-intelligent yet childish man. He was no different than all the other men she knew, yet she loved him.

He was no different because all the men she knew were carefully sorted and typed from birth through childhood and early manhood to maturity when they were turned loose into the level of society and the occupation for which they were prepared.

The women were also. Jannet knew she was no different than all the women Fred knew, except for slight facial characteristics. Inside, they were all as alike as copies of the same book off the same press.

Why was she in love with Fred? There was no special reason. People paired off and loved each other. She had to pick someone or be declared socially ill. She probably loved Fred because she had to love someone to get along. And he probably loved her for the same reason.

They both knew that in discussing whether they would choose a punishment or to "go through with it" that they were probably saying exactly the same things that all the others before them had said, in the same tone of voice, and with the same emotional accompaniments.

They both knew that their individual choice would follow a certain pattern. It was known in the coordinating department exactly what percentage of refusals would be forthcoming. That percentage was known and used in the selection of prospects and a hundred and some odd percent of the couples needed for the task were asked so that a hundred percent of those needed would accept.

It was all very simple. Everything was simple and routine,—except for the project they must become a part of for one year. One year *if* they did not permanently join it as patients. Even the probability of that was now accurately "curved". The replacements were accurately predicted. The survivors were exhaustively psyched and every characteristic of their mental makeup was tabulated in order to find just what characteristic common to the class of survivors made them survivors. So far it hadn't been found.

THE WHOLE thing was just a routine problem of the race which would be solved in a few more generations. Then the one remaining mental disorder of Man would be solved. Already it had been reduced from a fifteenth power logic equation with thirteen unknowns to a seventh power logic equation with two remaining unknowns.

The two unknowns were the factor that made the malady contagious when it could not be organic, and the factor that made seven and three tenths percent of those in contact with it its victims each month, while three percent remained permanently immune.

Jannet and Fred walked along hand in hand, lost in their gloomy thoughts. It did not help them any to know that they had been handed the choice to make at the exact time their depressive period passed its low. In fact, they did not even think about it. That was elementary psychology. Their emotional cycles were included in their files. It could be predicted exactly what mood they would be in on any day during the next year. One would have to be insane to barge in on a person with some request without first consulting the person's emotional curve. That was elementary!

They turned into a doorway and walked down a long hallway, finally opening a small door on which the

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

number sixty-three was painted in silver.

Inside, Fred carelessly tossed his hat onto a chair and walked across the soft carpet to a mahogany finish liquor cabinet, pouring two drinks of a sparkling pink liquid.

Jannet stretched out lazily on the davenport and sighed in relaxation, stretching out her arm to take the drink Fred offered her.

This was their apartment. The only difference between it and the other ninety-nine apartments in the building was the number on the door, and perhaps the names of the books on the bookshelves. But then, since the apartments were designed to be perfect in every respect any variation in their accomodations or finish would have had to be less than perfect. Everyone was satisfied.

In fact, dissatisfaction would have been a symptom of excessive irrationality! In order to understand this, how would you regard a man in an elevator who suddenly demanded that the operator make the car go faster when it was obvious that the car was already going at its top speed? Or how would you regard a man who insisted that a street car drive up to his door and stop, instead of at the corner where it is supposed to stop? Or who insisted on driving his car on the left hand side of the street?

Desire for variety in any society must be limited to what the society as a whole considers permissible. You do not feel excessively inhibited because you have been brought up in the society in which you live. Fred and Jannet were the same.

Why should they desire a color scheme other than the one proven most desirable by every psychological test? Why should they desire any other furniture or arrangement of furniture than that proven to be most desirable from every standpoint? A desire for something less than perfect, "just to be different," would have been irrational in the extreme, and would have been no more possible to Fred and Jannet than an insistence on driving through heavy traffic on the wrong side of the street would be to the reader!

WHILE the scene and comments above were being shown, I was busy trying to estimate the probable period in the future that it all depicted. Not the twentieth century! The ordinary concepts of living were too different than our present ones to have been gained in such a short time. The dress was not too strange, the language, as I read it from their lips as they moved, was still ordinary American. But everything was too perfect and the psychological makeup of the couple was too ingrained and too foreign to ours to have been arrived at in half a century.

The apartment scene faded to be replaced by what was obviously an office. Seated at a desk was a very capable looking young lady making notes. Seated in front of the desk were Fred and Jannet. The capable young lady was glancing at her watch. She checked the time with her notes, then said, "Perfect reaction. You were predicted to reach a decision and come to my office within a certain three hour period. That period still had an hour to run."

She added a few notes to the file and then closed it with a smile of satisfaction. "That will be all here," she added. "Next Tuesday you will attend a preparatory lecture on the disease at the central auditorium. Then on Wednesday you will be ready to move out to the hospital dormitory."

Again the scene shifted. Now I

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

saw the inside of an auditorium that would seat about four hundred people. There were perhaps thirty-five or six in the audience, all much alike in dress and appearance. Fred and Jannet were among them.

The lecturer was a man whose age I guessed to be forty. As the guess arose in my mind the thought came, "He is two hundred and sixty-three years old!"

He started speaking. "You are all aware of the general nature of the insanity you are to study. I will, however, review it in detail to refresh your memories. Every person has what is called an emotion curve. This curve has various elements in it which have been thoroughly classified. There is the daily cycle which is controlled by your daily work, your time of sleeping, and your times of eating. There are the gland cycles, the most dominant of which is the sex cycle. But each gland has its own distinct cycle of influence on a person's emotional behavior. There is the manic cycle which in most cases has a period of several years. And there is finally the race cycle which is detectable in the individual as a distinct element of that person's curve.

"All this is known, and in the file of each of you there is plotted the curve of that person, together with all the data that goes into the curve's composition. This is necessary, and is the responsibility of the government. If the low of every element of the curve is to come during some particular period it is well known that the individual is likely to contemplate suicide, or some other illogical act.

"Back in the dark ages when all this was not known suicides were common, and other mental disorders. Now we know that no individual should be the victim of his tremendously complex emotional structure. When it is predicted that several laws will come at the same time the person is warned and watched carefully until it is past.

"MOST MENTAL disorders increase the amplitude of some particular element of the emotional curve. Thus, if the thyroid is abnormal, it comes out in the person's behavior, the person is sent to a hospital, and the abnormality corrected. All types of insanity have been shown to be of this type,—except one. That is the one you are to deal with for the next year.

"This type of insanity is distinctly different in that rather than altering the amplitudes of known emotional factors of the normal curve, it introduces new and still unknown factors.

"You are all acquainted with the history of the emotional curve, and how, by the study of this curve three hithertofor unsuspected glands were discovered. The parallel case in astronomy is the discovery of new planets by the behavior of observable and known planets.

"Taking the analogy of planetary motion, this type of insanity is much like the predicting of other planets in certain places which attract the observable planets and thus influence their motions, while at the same time actual observation and actual inspection of the spot where the new planet would be shows that there is no planet there!

"Getting back to actual cases, we have in the normal person twenty-seven distinct frequencies in the composite curve of emotional state, all correctly tabulated and attributed to their respective glandular activities. The normal human, and even the abnormal one has these twenty-seven. No more, and no less. In ordinary in-

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

sanity one or more of these frequencies develops an abnormal amplitude.

"In the insanity on which you are about to devote a year of study some of the patients have as many as eight hundred distinct frequencies going into the composition of their emotion curve. Some have only twenty-eight—just one more than normal.

"The cause or causes of these additional elements are still completely unknown. We know a great deal about the behavior of the disease, though. Some of the patients are normal in every way, except that they have the additional elements in their emotion curve. When these elements are observed and recorded the behavior of the patient is entirely predictable, just as in any normal person. They may go through life, after the acquisition of the additional factors, without being considered abnormal in any way.

"Others, with the addition of only one new element to their curve, may have their reasoning ability affected, the amplitudes of all other elements of the curve affected, or any one of many abnormal traits.

"When the number of new elements in the curve goes above ten, in every case behavior is abnormal. When it goes above one hundred the entire personality becomes deranged and ability to concentrate becomes negligible.

"In all cases of this disease the first sign or symptom of its presence is a sudden abnormality of taste and a desire for change and variety in all things.

"NOW WE come to the most startling phase of the whole disease. In an isolated group of patients and attendants the number of additional factors remains a constant. That is, if in a group of one thousand patients and twenty normal attendants there are an aggregate of three thousand additional curve elements over the norm, then the number may become greater or less in a single patient, some of the attendants may acquire the malady, some of the patients may recover from it,—yet the total number of elements in the group remains unchanged, three thousand.

"If one of the patients dies in the area it does not change that number. In one case a patient with eight hundred extra curve elements committed suicide. On the next day's examination the eight hundred elements had distributed themselves among the living patients!

"In conclusion, exhaustive tests have not shown these strange elements to be caused by any known gland. Surgery has removed the glands as possible offenders. Although the malady is contagious it is not caused by any conceivable germ or virus but may possibly be due to some non-living substance. By that I mean a substance that does not multiply or reproduce. Some persons are completely and permanently immune while others are susceptible, the degree of susceptibility not being related to any known psychological or physiological factor so far.

"The complete recorded history of progress in this field will be made available to you upon your entrance into the hospital grounds. You will have three weeks of directed study before confronting a patient. During that three week period you will undergo daily examination. Three percent of you will succumb to the malady before seeing a patient. Thereafter seven and three-tenths percent of your number will succumb each month, while three percent of you will never be affected.

"That means," the lecturer concluded with a bland smile, "that *one*

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

of you here will come out at the end of the year totally unaffected. That one may volunteer for further duty in the hospital. The rest of you will undergo daily examination for six months after release from duty until all possibility of infection has passed. That is all."

There were brief scenes in the hospital library and lecture halls, and pages from books were shown. The incoming attendants learned many things. For example, they learned that the six to eight hundred groups were susceptible to leprosy, that every patient was susceptible to cancer, while no person that did not have malady X, as it was called, could contract leprosy or cancer.

They learned that attendants in a ward where the two to five patients were quartered were susceptible to various diseases, while the patients were not. They learned that there were an estimated three hundred billion units of the disease in the world, two hundred million under isolation in hospitals, and that the number of units neither increased nor decreased ordinarily, but that every few years it jumped several million units overnight.

They learned that any single patient could possibly be cured by certain specific treatments, but that he was cured only at the expense of someone else and almost invariably contracted the malady again in a few months.

And finally they learned that so far as the data then available was concerned, in another eight hundred years the entire race, with the exception of those who were immune, would have contracted malady X! It was a fight against time.

Another lecture was shown. The final one before the incoming class was to contact the patients. The concluding remark of the lecturer was, "The problem has been reduced to a logic equation in two unknowns. Every known concept has been applied to the equation without obtaining a solution. There are only two avenues open for the final breaking down of the problem; (1) the discovery of two new concepts, or (2) the uncovering of additional data which can supply us with the missing concepts. For myself, I have a feeling that the missing concepts can be found in the literature of the dark ages, particularly the period which includes the twentieth to the twenty-third centuries."

ANOTHER mad symphony of short scenes began. No cure for the malady was found. The number of victims increased. Finally thirty percent of the world's population was afflicted. Still we were not shown a single patient. Finally the inevitable came.

"The revolt of the irresponsibles", as it was called, was a concerted, world wide action. It succeeded in that the hospital inmates actually succeeded in taking over many towns and even some sections of the country and setting up their own government for a few weeks before the government forces got around to quelling them.

Somehow in the Utah-Colorado,—Texas section the irresponsibles gained control of the military forces and equipment. Ordinary action was useless against them, and a small war had to be fought.

In that war over three hundred thousand of the former hospital patients were slain, along with several hundred thousand normal persons. Before the orders for the slaughter were given military leaders of the government had a pitched verbal battle with leaders of the hospital general staff. A verbal battle resting on

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

the horns of a dillemma.

Killing the ex-patients meant that their X-units would distribute themselves among previously normal people and probably thin out so that several times as many individuals would become victims of the dread disease as they had started with. Letting them alone would mean permanent defeat in the century old effort to get at the roots of the malady and wipe out its causes.

Actually, the slaughter was the worst of the two evils. The X-units set free by the slaughter seemed to pick key men in all walks of life to settle in. The first indications of that were the sudden attacks on the government policy by outstanding news commentators and educational leaders. When some of these were tested it was found they had acquired the malady. They were promptly confined; but other leaders as promptly accused the psychiatric department of the government of trying to use the malady as an excuse to take over dictatorial powers. Public feeling began to run high.

The psychiatrists made the tactical blunder of saying in a public announcement that anyone who did not agree with them must be a new victim of the malady. They made raids on local protest meetings and actually proved their point—to themselves; but they had no chance to prove it publicly for the malady had infected too many prominent people and in a matter of a few days several psychiatrists were arrested and tried for treason.

THE MAD symphony went on, picturing the rise of a new America of madmen who made vast strides in the creation of new electrical and mechanical machines, and soon declared itself the champion of all oppressed peoples on the Earth.

The victims of malady X in country after country were released and given control of their respective nations. These nations formed alliances. Ambitious leaders arose and took over the reins of government. These leaders became more ambitious and formed blocs for world dominance.

The fight against malady X went underground, but made no more headway than it had made when it was the favored project of all the world's governments.

Laws were passed making a man's emotional curve his private property, thus taking inspection of it out of the reach of the psychiatrists, and also protecting the world leaders from the prying of the psychiatrists.

Wars once again were being fought on the earth and the annual casualties ran into the millions. Small atomic projectiles were made which had the explosive force of a ton or two of T.N.T. and could wipe out a city without danger of world destruction.

There was no defense against them because they were too small for nullification by a hysteresis ray and each plane carrying them was so equipped that destruction of the plane brought on a blast that completely destroyed the surrounding ground area below it for ten miles in all directions.

In some countries the terrain took on the appearance of the moon. Moon craters fifty miles across appeared in dozens of places.

The world population decreased from three hundred billion to a hundred billion in fifty years. Then, in another fifty years it decreased to twenty billion. Still the wars raged.

Cancer became a universal disease, blamed on the emanations from the atom explosions. Leprosy became common. Laws were passed that any-

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

one contracting leprosy was to be killed and cremated. Leprosy became a children's disease. Seventy percent of the children contracted it within a few weeks after birth.

The population of the earth decreased to about a hundred million. The law of execution for leprosy victims was revoked and finally war stopped for lack of explosives.

Leprosy, allowed to flourish, took on a new aspect. Rather than killing the victim it prolonged his life and made him immune to all other maladies. For example, a person about to die from cancer, if he contracted leprosy, soon lost his cancer and became physically fit.

Children who contracted leprosy grew into adults. Those who did not soon died of cancer. Leprosy was no longer a rotting disease. People lived hundreds of years with it without any signs of old age.

The world population decreased to a few hundred thousand and finally no more children were being born.

NAUSEA and disgust at the mad succession of horrible spectacles wrenched me back to the present and to the comforting surroundings of my laboratory.

I looked closely at my four friends. On their faces were reflections of my feelings, but in their fixed eyes was a faraway look. I knew that they were still viewing that "future" of the human race.

With reluctance I allowed myself to "return" to it. But it was gone.

There was a room. A room with bare, glaze finish walls bare of pictures. A solid block of the strangely soft plastic, that replaced beds somewhere along the line of the future, was pushed against one wall.

A chrome chair padded with the same plastic was in one corner. A man stood looking out of the window that formed the outside wall of the room, with his back to me. I say a man, for he was shaped like a man. Yet his skin was a strange mixture of solid and liquid. It seemed to move and shimmer and reflect all colors of the rainbow, like oil on a milky emulsion. His head was bald. He wore a white sheet wrapped around his body loosely.

Through the window I could see the panorama of a large, deserted city, and the glare of acres upon acres of smooth concrete spread in all directions to the distant horizon. Why it was there I did not know.

A strange aura of power seemed to emanate from this man. I felt subdued and awed. Finally he began to turn. Slowly. And as he turned I became aware that he knew *I* was looking at him. That all that had gone before was just a prelude for—THIS!

At last I was to meet the mind that had inspired me to build the copper can, and that had carried me on that mad journey from the beginning of the Earth's sojourn in the solar system down through the ages to the last, hopeless age of the race.

Who was he?

As his body turned, his face lingered on the view through the window. With dramatic suddenness his head turned and the full power of his eyes bathed me with a tingling wave of almost supernatural power. He looked directly at me. Forgotten was the laboratory, and the twentieth century.

Wherever this man was in time or space, whether he was real or only a symbological creation of some unseeable, unknowable Being in the present, in effect I was really in that room with him, and he was as real as you or I.

He was a leper. One of those last

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

members of the race. His eyes were large, glowing pools of pale green fire. His face and head were hairless, the white skin alive with subtle movement of color and muscle.

HE SEEMED to have been waiting ages for just this moment, and as his eyes fixed mine in friendly caress a faint smile tugged at the corners of his sensitive mouth. He began to speak. Calmly and slowly, yet in such a way that every word planted itself indelibly on my mind. Even yet I can call up every intonation of voice, every shade of meaning, from the depths of memory. And I know that I will never forget.

"You have seen, the history of the planet, from the time, it first saw the sun. You have seen, the birth of Man, his rise and fall, and eventual death. You now see me. You could not see me before." A note of ineffable sadness crept into his voice, and his face became weary. "You could not see me before, for the same reason, a man without eyes, cannot see the splendor, of the setting sun. I had to give you eyes, to see me."

He stopped talking and turned again to the window. Almost I thought he had forgotten me, so long did he keep his back turned. Finally his shoulders straightened, as if he were gathering strength for further effort. Then he turned and faced me once more.

"You wonder, who I am. You wonder why, you have been shown, these things, and why, you at last, see me. A farmer, sows his grain, on fertile ground. He sows seeds, and seeds. They grow, and die. They reproduce, and die. They lie hidden, in the soil. They come to life, and die."

He spread his arms, as if taking in all the past and present. Then he said, "Those, are seeds. Futile seeds, perhaps, yet seeds. I am, therefore I must be. Yet perhaps, I am not. Then these seeds, are not futile."

Suddenly the bare room vanished to be replaced by the concrete view of my own lab. Yet this stranger did not vanish. He stood on the floor of the laboratory in front of the table on which the telepathic augmentor rested. And he seemed oblivious of the change.

I could see my four friends out of the corner of my eye. They too were looking at this man with unnatural intensity.

He continued. "As the centuries, roll by, perhaps these seeds, will grow. Grow, to bloom, upon an immortal race. There is a mystery. Yes. Not the mystery, of who, I am, but rather, of whether, I am. For I shall tell you, who, I am."

A wry smile stole over his face. "One of you, will not, learn." And then the smile changed to a blend of sadness and pity. "Four of you, will know."

He turned his green, living eyes on John Denning and said, "When I go, plug in the cap, and place it, on the table. Then lift it, and look. *You* will know, who I am."

THEN HE was gone. It took a full minute to realize he *was* gone. The telepathic augmentor sat quietly on the table. The room was hushed, the sound proof walls killing all outside sounds. And the strange, undulating space a foot above the table seemed alive, and deep. Deeper than space itself, and containing the secrets of Being and Reality,—and of not-being and unreality.

John hesitantly approached the table, looking questioningly at me. I nodded my consent. His back was turned as he unplugged the amplifier box that served the same as a loudspeaker does to ordinary radios, and plugged in one of the hats.

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Then he set it on the table, open part down and waited a full minute. I can see him yet as he finally lifted it, beads of perspiration glistening on his brow, to expose that Name written in lines of light.

I can see him, and Dorothy, and Claude, and Arthur, as they looked at it. First they were puzzled. Then an expression of startled amazement spread over their faces. Then—the muscles in their faces crawled with horror, twisting their countenances into horrible masks of wild, naked *RAGE! Rage* that made them speechless, immovable statues! Horrible caricatures created by some insane sculptor. Their eyes rose from the strange yellow scrawl as at a signal, and glared into that undulating Space.

Then suddenly something seemed to snap. A sound as of a melodious chime seemed to come from miles away. I seemed to glimpse four fleeting wisps of something flash toward that Space and vanish, as debris vanishes in a whirlpool.

Pain struck my eyes and seemed to sear my brain. For an instant I was blinded. When I could see again the copper can rested on its wooden frame.

I turned to my friends. They lay on the floor as though dead. Running to the wall phone I called an ambulance. While it was coming I felt for signs of life. Their hearts beat faintly, and their breathing was regular.

I rode to the hospital with them. I was there when they opened their eyes. Their eyes so devoid of life. I thought of the stranger's eyes, so large, and green, and *full* of life,—almost as if—?

As if—WHAT? What mystery lies here, beyond the ken of Man? What evil lies hidden in the soul of Man, —so vast and old, that can be called up by one word? One senseless scrawl in lines of yellow light that vanished without a trace? That can distort the face of an ordinary man beyond description and pull its muscles taught with rage, and snap the fragile thread that links him to the Gods?

What is this Destiny toward which we march, generation after generation? What is there about it that can drive one mad to gaze upon it? What is there about the dark that can cause men to tremble? The dark that is so like that strange Space through which I saw the history of the Earth unfold before my eyes?

It is best, I know, that we do NOT suspect. And when I read of some great man suddenly going mad I wonder if he, too, has seen, as did John, and Dorothy, and Claude, and Arthur; and seeing, escaped into some hole in Space, or was perhaps sucked unwillingly to a Doom beyond his power to fight against?

COMING NEXT MONTH:—

THE INVOLUNTARY IMMORTALS

By ROG PHILLIPS

A great new book-length novel by the author of "So Shall Ye Reap." You will thrill to this stirring story of a group of men and women who suddenly found themselves immortal — and didn't know why! Be sure and reserve your copy of the big December issue ahead of time!

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

NATURAL ROCKETS!

★ By MILTON MATTHEW ★

IF YOU were to ask the average person for an example of the latest development in science, he might answer with perfect confidence, "the rocket, or the jet." We think of these things as the perfect contrast to nature. Where in nature has the rocket ever been used? Without thinking one would be inclined to say it hasn't —and one'd be wrong, absolutely wrong!

It so happens that the rocket principle was the very one nature chose for its first system of providing locomotion to living things! And this is not as incredible as it seems for if one reflects, it can be seen that of all the machines, the rocket happens to be about the simplest, consisting merely of fuel burning in a chamber.

Nature must have thought the same thing. Her rocket was developed way back in what is called in geology, "the early Silurian period." About three hundred million years ago life was beginning to develop in the sea. Among the earliest creatures to move from one place to another were the "cephalopods" which means in Greek "head-legged" and which explains a good deal. The cephalopods wrapped muscular folds of the bodies about quantities of water, then squeezed, and ejected the water in the form of a stream—just like a rocket! And they moved ahead. The common squid, one of the remaining cephalopods, uses the same system today. While the "rocket" principle was the first method, nature recognized that while it was easy to develop it wasn't efficient in the viscous fluid known as water. Hence she abandoned it rather early and it is only the old-fashioned reactionary squid who use it. It may be seen however that the squid acquired fins to help out.

Streamlining is necessary for high speed in water, a fact which nature learned rapidly, and the result was that she stressed the rigid skeletoned creatures at the expense of the soft-bodied ones. But the major point, that rocketry appeared in nature at the very beginning of animal time some three hundred millions years ago, proves the old adage that there's nothing new under the sun!

* * *

PROGRESS REPORT

★ By JON BARRY ★

THIS IS A progress report on a technique which will probably be of inestimable value to everyone. We have kept informed of the advances made in *burning coal underground.* It can be pointed out that this is going ahead quite successfully. The Bureau of Standards has a number of experimental "mines" in operation. The principle you may recall is simple.

Two holes are drilled in the ground over a thin not-easily worked coal seam. Down one hole is dropped an incendiary bomb after which air is pumped into it. From the other hole comes coal gas. That's all there is to it.

Gas can be piped from one place to another easily and cheaply. It is a far cry from mining coal and hauling it around. Furthermore the system can work where the coal is of poor quality and badly mixed with shale. Numerous European countries are experimenting with the system successfully. The U.S. isn't lagging behind. Some have said that in thirty years, mining coal underground, except for the relatively small amount needed to make coke for the steel mills, will be an unknown and unpracticed procedure. The American "burning mines" are going full blast. It now remains for the testers to put it on a large scale basis!

SWAMP AIRPORTS

★ By CAL WEBB ★

IT IS extremely difficult to drain swampy marshy land. To make it firm and rigid and useful for any purpose is generally a costly time-consuming job. But when people want to build airfields they can't wait. This is ably demonstrated in a new Swedish invention.

An engineer has designed a huge machine, looking much like a pile driver. This heavy, rubber-tired vehicle crawls over the swamps that are to be drained, sinking pile after pile into the soft ground. But the piles are made of an absorbent paper. They are driven fifty feet into the earth with the aid of a steel pipe. The pipe is withdrawn leaving the absorbent paper in the ground. Then just as in a wick, the capillary effect of the paper pile sucks up the water to the surface where ordinary evaporation takes care of it. Within a year the ground so prepared is firm and dry and ready for construction.

It is believed that the Army will investigate such apparatus since it is particularly concerned with firm ground as a base for heavy airfields to be used in guided missile and heavy bomber work. In the Arctic lands in summer, swampy ground is characteristic of the terrain. The solution is a drying process like the one described.

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Sleepwalker of Sandwich

By LEE PRESCOTT

Jeff White had his hands full when he tried to follow the sleepwalker, for after a few steps—he walked into another world!

THE GIRL stared hopefully at Jeff White from behind her desk.

Her face was not pretty with its wideset buck teeth and belligerent eyes.

"Good morning, doctor!" she said hostilely. Her eyes said that a month's pay would have improved matters considerably.

Jeff White removed his hat, grunted a quick greeting, and entered his private office beyond his secretary's desk. He found a feather duster and swished it wearily across the surface of his desk and over the steel filing cabinet. Finally he put the duster on top of the cabinet and sat down behind his desk. He began to sort the morning mail that Miss Prim had placed there.

There was an advertisement for vitamin pills, three letters from patients who couldn't pay their bills, and a perfumed letter postmarked Sandwich, Illinois.

White opened it, wondering who he knew in Sandwich. He was a little impatient with the name itself. It reminded him that he had not eaten since last night, and didn't know just when his next meal would come. It reminded him also that Miss Prim was hungry. Not that Jeff White worried a great deal about Miss Prim's stomach. He simply hated to lose a good secretary because of a month's back wages.

He slipped the letter opener into the flap of the envelope. The letter dropped on his desk. He picked it up and struggled to decipher the scrawl:

Dear Doctor White:

I understand you are the type of doctor who can make crazy people well. I don't know nothing about sycoligy, but Wilbur, that's my husband, walks in his sleep. He's driving me crazy. Will you come out and see what you can do about him? I'll be expecting you this afternoon.

Respectfully,

Mrs. Maggie Jarvis
Route 2
Sandwich, Illinois

White dropped the letter on the desk, his face openly registering disgust. As he did so, an oblong slip of paper drifted from the envelope and fell face up before his startled eyes. It was a green check. He picked it up with shaking fingers and started to read. His eyes were badly blurred.

"First National Bank
Sandwich, Illinois

Pay to the order of Jeffory White, $500.00,

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Jeff held on to his arm with a grim desperation — for he was suddenly walking on air!

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

signed, Madge Jarvis."

Miss Prim was sure, from the sounds that came from Doctor White's office, that he had at last followed his patients and gone stark, raving mad. Her eyes were on his door when he rushed out, medicine-satchel held firmly in his hand. He hurried across the outer office, then seemed to come out of his trance as he reached the door. He pivoted, eyes shining with the glory of one who has at last struck pay dirt.

"If anyone calls, tell them I'll be away for a few days."

Miss Prim stiffened.

"About that small matter of my pay?"

"Oh yes!" White frowned, "Your pay? I'll leave two weeks pay for you at the cigar stand downstairs. I'm cashing this check right away. You can collect when you go out for lunch."

Miss Prim sighed gratefully. White hurried into the hall, then returned, grinning a little sheepishly.

"I forgot to tell you, I'll be in Sandwich. You can reach me at the home of Mrs. Jarvis." Then as an afterthought, "Which reminds me, you have to eat. Have a sandwich on me, and wish me luck."

He tossed his last quarter through the air and it landed on the desk-top.

"Remember, I'll be at Sandwich."

This time he was gone for good, almost breaking his neck in a two-point landing near the elevator.

EVIDENTLY the Jarvis' had money. Doctor White had ample evidence that they didn't mind parting with it. He approached the big farm house, near the edge of town, with some misgivings. Five hundred dollars was a lot of money. Suppose they changed their minds and wanted it back again? He thought of the huge meal he had consumed on the train, and thanked his stars that he had *that* much, anyway.

The house was a two story affair, square as a box, with a huge apple orchard growing almost at the back door.

He climbed the steps and knocked. He waited for a minute, then knocked again. The door opened a crack and a beautiful girl stared at him. He removed his hat quickly.

"Pardon me, Mrs. Jarvis, I'm Doctor White."

The door opened and he was sure that the girl wasn't over twenty-three. She wore a gray business suit that fitted trimly over just the correct number of curves. Her eyes were a cool, deep brown and her lips were moist. Her slightly whimsical stare weakened Jeff White's knees.

"Please come in." Her voice was warm. "Mrs. Jarvis is upstairs. My name is Martin—Adela Martin. I'm Mr. Jarvis' Secretary."

"I'm terribly sorry." He felt like a fool for mistaking the girl for some old goat who would probably be twice her age. "Mrs. Jarvis asked me to call. I thought naturally..."

"You were perfectly right," Adela Martin insisted. "It *is* a little odd that a secretary should be here."

"Not at all." White was trying desperately to right a wrong. "I—I, that is, Mrs. Jarvis is expecting me isn't she?"

White sat down on the edge of an uncomfortable horse-hair couch and watched her as she moved gracefully toward the door to the back of the house. At the door she turned, and a puzzled expression came over her face.

"I don't think Mrs. Jarvis should tamper with her husband's habits," she said. "Perhaps he is better off the way he is."

White stood up quickly.

"Just a moment," he said. "I know

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

nothing about the case. Just what *are* Mr. Jarvis' habits?"

"I'd rather let Mrs. Jarvis tell you," she said evenly. "But his sleep walking does him no harm. Heaven knows what will happen if we try to change him."

She was gone then, and the door closed softly behind her. White sat very still, listening to the sounds that came from various parts of the house.

Somewhere outside a locust started its shrill warbling. Footsteps rumbled heavily on the second floor. The front room was very hot.

A slightly-built, gray-haired little man sneaked in from the back of the house and stood before Jeff White.

"My name's Wilbur Jarvis," he said, as though being prompted from the side of the stage. "Please to meet you."

Jeff took the small, frail hand in his big fingers.

"I understand that Maggie sent for you," Wilbur said. "I—I can't imagine why?"

He cocked his head on one side like a fox terrior, waiting for a reply.

White smiled.

"I really don't know why I'm here, sir. I feel that as your wife wrote to me, I should speak to her first."

It was increasingly clear to him that Adela Martin had called Mr. Jarvis before she called his wife. Just what did that mean? Certainly this girl didn't see anything in Mr. Jarvis beyond a monthly pay check?

HE WAITED, watching the male member of the Jarvis family through slightly speculative eyes.

Adela Martin reappeared at the door.

"I believe Mrs. Jarvis is coming down now," she said coolly.

Footsteps rocked the house, as though an earthquake were approaching. They reached the hall at the top of the stair, and came down slowly. Maggie Jarvis must have weighed two hundred pounds and she put it all down heavily at each step.

"Oh! My Goodness! We have a visitor. This must be Doctor White?"

Before Jeff White could admit the fact, she had hurdled the question and was talking again. "I'm *so* glad you came, Doctor. Wilbur is suffering terribly. We *must* get to the bottom of this terrible affliction before it's too late."

She stood there, quivering excitedly from head to foot.

Maggie Jarvis, White thought, hadn't been built by usual standards. Where others left off, Maggie started. A towering, rolling mountain of flesh. Her tongue ran automatically.

"I hope I can help," White managed.

"Sit down, Doctor," Maggie urged. "You must be tired. You see, with Wilbur so terribly ill, I couldn't afford to lose time. I..."

"I'm not ill," Wilbur protested suddenly.

His wife turned on him, caught off guard by the unexpected remark.

"Wilbur, *please!*" Then, to White, "Wilbur walks in his sleep *every* night. It's driving us mad."

White glanced quickly toward Adela Martin. The girl was sitting alone near the window.

"But, I like to walk in my sleep," Wilbur said. "It's—it's good exercise," he finished a little lamely.

Jeff White forced his eyes back to Mrs. Jarvis. He was becoming uncomfortably warm on the horse-hair couch. Mrs. Jarvis sank down beside him like an inflated balloon, and launched into a full explanation.

"Wilbur, poor dear, has been working too hard. He looks just like a ghost. Elria Pratt, she's a friend of mine, told me you are just *wonderful* on nerve cases. I *had* to ask you to come."

White felt his interest lessen every

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

moment. Yet, there was a faintly mysterious and beautiful young woman, *and* a check for five hundred dollars involved.

He didn't know which affected his decision.

"I'll see what can be done."

Mrs. Jarvis was overjoyed.

"I'm *so* glad," she cried. "You see, this isn't just the usual case of sleepwalking. *Wilbur disappears.*"

White came forward with a start. He tried hard not to act startled.

"Wh-what?"

Mrs. Jarvis regarded him with eyes dancing with excitement.

"Yes," she assured him. "Wilbur walks to the end of the hall in his sleep, and then he disappears."

WHITE heard Wilbur's protest. He tried to convince himself that he had heard Mrs. Jarvis correctly.

"I don't do any harm, do I?" Wilbur shouted. "Why can't you leave me alone?"

"They're crazy," White's mind kept repeating to him. *"They're both crazy."*

"You are sure that you want *me* to handle this case?"

He let his eyes travel once more toward Adela Martin. To his surprise, she nodded ever so slightly. Until now, he had been sure that she was against his being here. Now she seemed to have switched to his side. He turned once more to the lady of the house.

"A b o u t—this disappearing?" he said. "I'd like a fuller explanation."

Maggie Jarvis shrugged her shoulder.

"He just walks into thin air," she said. "I don't like it. What if he goes away some night and doesn't come back?"

"There's my insurance, dear," Wilbur reminded her meekly. "You'll be well taken care of. Besides, I don't really disappear, I just hide."

Mrs. Jarvis tittered.

"Now Wilbur, *I* wasn't born yesterday. You disappear, and you can't tell me any different. I want Doctor White to stop this nonsense."

White scratched his head. Was it his imagination, or had Adela Martin winked at him?

"Let me get this straight," he said at last. "You, Mrs. Jarvis, brought me here to cure your husband of sleepwalking, and—er, disappearing, is that right"

A quick nod, and White turned to Wilbur.

"You're perfectly satisfied to let conditions remain as they are?"

Wilbur looked shyly toward his wife.

"I—I don't mind," he said. "Besides, you can't do anything anyhow. We won't fight if you stay. It's up to Maggie."

White took a deep breath. He didn't want the job. He would put the fee so high that they'd be anxious to get rid of him.

"The fee will be a thousand dollars," he said in a calm voice.

He saw Adela Martin stiffen, as he shot a puzzled glance in his direction. Wilbur flinched, but his wife's face didn't change by so much as a twitching muscle.

"That's fair enough," she said, and stood up. "You'll find your room at the top of the stairs. Walsh will bring your luggage up from the station."

"Walsh," Wilbur Jarvis offered in a smug voice, "is the hired man. He's a *great* favorite of Maggie's."

Jeff glanced at Adela again. Her face carried no message this time. Still, he didn't like the slyness that crept into Wilbur's voice when the little man mentioned Walsh. Was this the middle-aged version of the eternal triangle? He'd have to take

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

a good look at Walsh.

BEFORE evening arrived, Jeff White had a working knowledge of the Jarvis household.

Walsh Davis, the hired man, arrived from the railroad station shortly after five. He carried White's luggage up to the Doctor's room, and dropped it near the bed. He started to retreat, but White was waiting for him near the door. He removed his pipe from his lips.

"Your name is Walsh, isn't it?" White asked. "Thanks for bringing up my things."

Walsh stopped in his tracks, staring hesitantly.

Walsh Davis," he said shortly. "And you're welcome."

"What do you know about this sleepwalking business?" White asked.

"Nothing!" The hired man frowned, and his shoulders hitched forward. "And if you get out of here and mind your own business, you won't either. That's the best thing you can do, if you ask me."

White stepped aside as Walsh Davis moved past him, toward the door. The Doctor's fists were clinched.

"I didn't ask you," he said calmly.

Nothing short of war could drag him from the Jarvis home now.

Adela Martin was strolling among the apple trees behind the house. White approached her slowly, enjoying the lazy, graceful way her fingers reached out to grasp a handful of apple blossoms.

His foot cracked a dry twig and she turned quickly, a startled expression on her face. The look of fright changed to a friendly smile.

"I thought...?"

"What?" He asked, and moved closer to her.

Her eyes dropped.

"Nothing. It's just—well, sometimes I'm a little afraid."

"There's something going on here that I don't understand," he said frankly. "You're the only person I can talk to."

Her voice grew suddenly fearful.

"I'm Mr. Jarvis' secretary. He does his real estate business at home and I handle the details. Beyond that, what goes on in the family is none of my business."

He regarded her patiently.

"I have the impression there's something going on here that definitely *is* your business. So much so that you're badly frightened. You were relieved to hear that I was staying, even though the fee was so high that it offended your good business sense."

Her eyes swept up again to meet his.

"If I tell you something—something terrible, will you keep the secret?"

He nodded, waiting.

She came closer, putting a small, warm hand on his wrist.

"Maggie paid you a thousand dollars. Don't you think she must be worrying terribly, to part with all that money?"

"It *is* a lot," he admitted.

"Doctor White," she asked, "is it possible for a man to dream so vividly that he can drag other people into his dreams?"

White's jaw stiffened.

"Put that in simple language," he said.

The girl held his hand tightly, as though afraid to let go.

"Mr. Jarvis insisted that I live here with him and his wife. He prefers handling his business at home. Don't misunderstand me. Mr. Jarvis has always treated me with the greatest respect. Yet, every night I have the same horrible nightmare."

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

She leaned closer to him, as if a great fear stalked behind her.

"There isn't much to tell. Night after night I dream. Always the dream is the same. He is there, and Maggie and Walsh Davis. They quarrel bitterly. Wilbur seems to be trying to kill his wife. I fight to release myself from that dream. I've always been able to awaken after a time, but it's terrible."

She broke off, biting her lip.

"I tried to get away. I slept in town for a few nights, but it was the same. I couldn't break away from that dream."

"Take it easy," White said. "I'm going to try to stop that dream, and some of the other unpleasant things that are happening here!"

Her face tipped up to his and she smiled wanly.

"If only you could."

She moved away from him then and ran swiftly toward the house.

White returned to his room. Once inside he opened his trunk. From a small collections of books, he chose a heavy, leather bound volume by a man he greatly admired, Professor Sigmund Freud...

WHITE didn't go down to dinner. He excused himself when Mrs. Jarvis called, saying that he had to catch up on some studies. For an hour afterward, wisps of a hot argument drifted up to him from below. Wilbur's voice rose high above the others. It was evident that Wilbur Jarvis did *not* want his sleep-walking activities disturbed.

White continued to read until nine o'clock. He heard footsteps on the stairs, and opened the door of his room a crack. His light was out and he was hidden from anyone outside the door.

Wilbur and Maggie slept at the front of the house, at the far end of the hall. Jeff smiled softly as Adela Martin entered the room opposite his own. The porch and apple orchard were behind him, at the opposite end of the hall from Wilbur's bedroom. Wilbur would come this way if he walked in his sleep tonight.

White closed the door, knocked the pipe ashes into a tray and pressed the fire out. He slipped into his robe and moved quietly into the hall. He carried his small medical bag in one hand.

The moon came up over the orchard, He stood in the darkness for a long time, thinking of Adela Martin. His emotions were confused. Adela was frightened, but that hadn't fully accounted for her confidence in him.

The door of Wilbur Jarvis' room was opening slowly. At first it hung slightly ajar, then swung wide. White glanced at his watch. A little after eleven.

He pressed tightly against the wall. Jarvis, clad in a long nightshirt, moved down the hall toward him like a ghost. There was no doubting the man's story. He *was* walking in his sleep. Wilbur's eyes were wide open, staring straight ahead. Thin wisps of gray hair floated back from a shining scalp. The nightshirt drifted in the breeze.

His arms were stretched before him as he pad-padded along the carpet. A smile of content was etched on Wilbur's scrawny face.

White waited. The sleepwalker passed him and walked out through the screen door that led to the second-story porch. White followed, remaining as silent as possible. The sleepwalker went straight toward the edge of the porch.

In two more steps he would fall a full story to the ground. White moved forward swiftly and grasped Wilbur's arm. One slipper was already over the edge of the porch. White held on tightly but Wilbur's

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

strength increased. White felt himself dragged forward against his will.

Suddenly he realized that they were both beyond the porch.

Stars seemed to fall and converged in a blinding flash inside White's brain. The porch was gone. He was clinging tightly to Wiblur's arm.

They were walking arm in arm, with nothing to hold them up.

"YOU SHOULDN'T have done that." Wilbur's voice was suddenly powerful and angry.

White started to speak, but his lips opened soundlessly. They were walking over the orchard. His feet struck solid substance and he moved forward steadily. Yet, there was nothing under him but the tops of the trees.

"I—I don't understand." The words escaped his dry lips.

Jarvis let go of him and turned, arms akimbo. His weak eyes were defiant. He stood like an ancient prophet, clad in a night-shirt toga.

"You've followed me into my own environment," he accused sternly. "We all have hyper-developed glands. Mine are so powerful that I can put myself into another world. I can bring others with me, if I wish. You came of your own accord. I didn't want you."

White kept walking now because he didn't dare stray too far from the power that held him to the other man.

"What do you intend to do?"

"I'm not sure," Wilbur said. "Naturally I tried to discourage you. This is my only retreat, and I don't like strangers who interfere with me. It seems logical that I will be forced to destroy you."

"But why?" White was fighting for time—fighting to gain a sane, professional outlook on what was happening. "I could promise to leave you alone."

Wilbur seemed to be giving the subject careful thought.

"Sorry," he said at last. "You couldn't be trusted. At least, not with Maggie after you for results. *I hate Maggie.*"

He added the last statement quite calmly, as though hate was a thing that you played with without letting emotion enter your thoughts.

"Wait a minute," White begged, trying to be reasonable. "Let's not get off to a bad start. I'm spoiling things for you, I'll admit. If you'll take me back, and call things square."

Wilbur shook his head.

"But I can't, not yet at least. You see, I'm awake now."

"What?"

Wilbur looked almost apologetic.

"When I come over the border, I wake up in the new world," he explained. "I'll be here for hours. I can't go back until I go to sleep again. I'm not the least bit sleepy."

White was angry, in spite of the fact that he knew his life depended on agreeing with the little man.

"Are you trying to tell me that we can't return to our beds? That you have to stay here until you're tired enough to sleep again and return to where we started?"

Wilbur nodded.

"That's it," he agreed. "I'll probably have to kill you before I go back, but first, I'd like your impression of what I've built."

"Built?"

Was it possible that Wilbur Jarvis, sleepwalker, had actually built something in his dreams?

"Certainly," the little man pointed ahead of them.

There was a high hill not far away. On its crest was the biggest castle White had ever imagined. His knowl-

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

edge was limited to castles he had seen in a college history book.

The country through which they walked seemed to be made up of a star-spattered sky. The hill was dark as night, but the castle loomed high and strong, with its walls of granite. Lights twinkled from the windows. Spires gleamed softly in the moonlight.

"Your dream castle?" White asked in a hushed voice.

Wilbur nodded. "I always wanted a castle. Took an awful long time to dream it up. I tried for years and years."

White wanted to slap his own face to bring back reality, return him to everyday life. Instead, he agreed with Wilbur.

"The prettiest thing I've ever seen."

That was evidently the wisest thing he could have said.

"Come on," Wilbur said impatiently, "I've got a lot more to show you."

THE CASTLE gate was open and the drawbridge was down. White followed Wilbur Jarvis across the bridge and into a lighted court yard.

"I can't seem to dream up anyone I don't know very well," Wilbur apologized. "Can't make them strong enough to appear here. I can bring Maggie and Adela—and Walsh. Walsh comes anyhow, even when I don't want him."

In a way, White could understand that. Wilbur was trying to inhabit his dream with other people. His mind wouldn't do this for him until he became completely familiar with them. White was beginning to understand why Adela had nightmares.

"I hate Maggie," Wilbur said again.

The castle looked entirely normal from the outside, but Wilbur's knowledge of castles had been good only so far as the outward appearance was concerned. Inside there was one vast room. That, White thought, was natural. Wilbur wouldn't have any idea of the construction, and therefore his dream would conjure up a simple, vast space wherever he couldn't fill in the details.

They stopped short at the door to the room and White's arm dropped from Wilbur's grasp. His tongue was dry. His eyes were wide with wonder. The interior was hung with huge red curtains. Great sofas, all perfect reproductions of the horse-hair creation in Maggie Jarvis' living room, were scattered about the room.

A group of people came toward them.

Every one of them was a perfect image of the three persons Wilbur knew best. There was no expression on the faces that stared at White. The figures moved as in a dream. Dozens of Maggies, Walshes and Adela Martins. There were so many copies of her, that they dazzled him.

"I'm—kinda sorry I have so many Maggies," Wilbur said modestly. "Couldn't keep her out. That damned Davis hadn't ought to be here at all. Can't prevent him from getting in a dream. Now Adela, she's different. I dream more of her every night. Got a whole harem to look at."

"You disgusting little nit-wit," White thought. "I'd like to choke you."

"But, what advantage do you get from all of this?" He asked aloud. "Surely you can't find complete happiness in a dream?"

Wilbur's face grew very concerned.

"Take your time," he said. "I'm taking mine. My dream is growing stronger every night. Soon I'll be able to dream this so vividly that I'll draw these people into my own world, and none of us will return."

The group had scattered now. The

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Maggies and the Walshes of Mr. Jarvis' dream had moved toward the wall, cowering away from him. The images of Adela were stretched comfortably on the many couches.

"I'll kill those I don't want," Wilbur's voice became cunning. "I'll have my castle, and I'll be happy—very happy!"

"The whole mirage will pop like a bubble and you'll wake up to reality!" White protested. "It's unnatural, Jarvis. It can't really happen."

"Can't it?" Jarvis wheeled about. "Tell me if this is natural. If you feel pain."

HE SLAPPED Jeff White full on the face. White stood there, bewildered and angry, seemingly unable to fight back.

"Do you think I'm a fool?" Wilbur raged. "I saw you and Adela together in the garden! I see everything she does. You can't save her. You can't save yourself."

He moved quickly to one of the couches. He leaned over and slapped one of the images of Adela full across the mouth.

Cries of pain arose from every mouth.

Jeff White knew now why Adela feared her nightmares. Why he had to stop her suffering once and for all.

"I *could* have been a fool," Wilbur Jarvis said. "I could have gone on watching Walsh Davis take my wife away from me. I could have been the perfect hen-pecked husband and kept my eyes closed. Instead, I brought Adela to my home and learned to know her so that I could include her in my dream.

"At first you would have laughed at my efforts. This images I brought here were poor, dreamy things. Now, I've become so powerful that I can make them almost real. In a few more nights I will bring them to the castle to stay. You have caused certain complications. Personally, White, I don't have any grudge against you."

"Thanks," White said sarcastically.

"But," Jarvis continued, "you'd just be in the way. I can't leave you around where you can tell people what happened, and get me locked in an insane asylum. I can't let you fool around until you find a way of getting here by yourself and causing me trouble. There's just one other way out."

"To murder me, of course," White said dryly. "Simple, isn't it?"

"I think so," Wilbur agreed. "But for the time being I'll leave you here until I return. You needn't be frightened. You'll be safely asleep while I'm gone. I'll return tomorrow night."

Before Jeff White's eyes, the whole scene started to vanish into mist. He felt an immense weariness taking hold of his body and fell forward into the mist. The world of Wilbur Jarvis was gone. There was nothing left but the dark sky and drifting, flashing stars. . .

WHITE awakened and sat up slowly, hoping that he was once more in the room at Maggie Jarvis'. Wilbur was bending over Him. Jarvis' face was radiant.

"I've done it," the little man shouted. *"I've got them here for keeps."*

White stared around him with increasing bewilderment.

He was still in the castle, but everything seemed so solid, so real.

"When I left you last night, I went back and made up my mind that I was strong enough to come here and stay. I concentrated very hard tonight. I won't have to go back again."

"Go back?" White asked a little weakly.

"Back to Sandwich," Wilbur

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

nodded eagerly. "I've dreamed them all here. It's so real that I know that I can stay. I *feel* it inside."

The scene was repeated. The scene that had occurred when White first came to the castle Adela and all of her images were here. The others also, much as they were before.

"I think I'll have to kill you first," Wilbur said almost apologetically. "Adela seems attracted to you too strongly."

It was true. Everywhere White stared, he met Adela Martin's pleading eyes. It was as though she were begging for help, realizing that only he could save her. Powerless to do anything about it.

White stood up a little unsteadily. "In a way," he said "You're a genius, Wilbur."

Wilbur Jarvis looked pleased. White noticed that he no longer wore the toga-like nightshirt. He was clad in his best business suit, and a long bladed bread knife projected from his pocket.

"Thanks," Wilbur said earnestly. "I thought the best way of getting rid of you would be with the knife. You don't object?"

White shook his head.

"As long as you have to die anyhow," Wilbur added, "I'll make it easy for you. I'm really sorry. . ."

"Don't be," White urged. He was feeling his way carefully now, using his best bedside manner. He handled the little man as he would a crazed Napoleon in the State Asylum. "I'll be glad to cooperate."

"Thanks," Wilbur said and drew the knife from his coat.

White knew that every eye in the room was on him. He looked deliberately at the figure on the horse-hair couch.

"Couldn't we drink just one toast to your success?" White asked.

This was the kind of praise that Wilbur had hungered for all his life.

"To have *you* say that is high praise, Doctor. I think I can find some wine."

He moved quickly toward the curtains and disappeared among them. In a moment he was back, carrying a large bottle and two tall glasses of wine.

"I suppose you will murder your wife and her suiter, when I am gone?"

"Oh, yes," Wilbur assured him gaily. "It isn't very hard to kill dream people."

White shuddered. He was nearly spellbound himself by the man before him.

"I've been noticing the unhappy looks on the images of Walsh Davis," he said calmly. *"I think he's afraid to die."*

In the split second that Wilbur's eyes darted toward Davis, a pill dropped from White's fingers into Wilbur's wine glass.

"Davis was a fool," Wilbur said lightly. "What he ever saw in Maggie is beyond me."

"A toast," White picked up his glass, "to the Sleepwalker of Sandwich, who made a perfect world for himself!"

They drank quickly, and Wilbur choked a little as he wiped the last drop of wine from his lips.

"AND NOW," Wilbur said, "if you'll just lie down on the floor, it will be so much easier."

White's fists were clenched tightly as he stretched out at full length.

"You won't hesitate?" he begged.

"Not for a minute," Jarvis promised. Not for a min..."

The knife fell from his limp fingers and his eyes grew bleary and out of focus.

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

"I can't quite see you," he whispered, and fell forward across White's chest. "I can't quite..."

* * *

"Jeff—Jeff, wake up."

Jeff White opened his eyes, to find himself staring up at Adela Martin. He was lying in the carpeted hall of the Jarvis home. Adela, clad in a frilly nightgown and bed-jacket, was on her knees at his side.

"Little dizzy," he said. "Help me up will you?"

On his feet, he swayed uncertainly and stared down at the out-stretched figure of Wilbur Jarvis.

"I heard a noise," Adela said excitedly. "I found you both lying here. Mr. Jarvis is all dressed up. He must have been planning to go out, and somehow bumped into you in the dark."

She stared at him, her eyes questioning, voice uncertain.

White took her firmly in his arms, to make sure that this wasn't another of Wilbur Jarvis' dream images. It wasn't. The warm, firm kiss that she pressed to his lips, convinced him.

"I don't think Wilbur will be taking any more trips, awake or asleep." He said grimly.

"But, Jeff, you couldn't—you didn't cure him?"

He didn't answer her question at once.

"You dreamed tonight?" He asked.

"For a little while," she said timidly. "I seemed to be far away. So far away that I couldn't get back. In my dream, you were in terrible danger, Jeff."

"I know."

"I tried to help you, but I couldn't move," she went on eagerly. "When I awakened, I heard you out here. I came as soon as I could."

White looked down again at Wilbur Jarvis, sleeping peacefully on the floor.

"You asked me if I had cured him," he said to the girl. "I think I have a cure that will keep him perfectly normal for the rest of his life."

"And Mrs. Jarvis won't have to worry about him?"

"Does she?" White asked.

Adela blushed.

"If you mean Walsh Davis, I don't think she cares for Walsh. She teased Wilbur to make him jealous. That was her way of trying to keep him from leaving her."

Jeff White was vastly relieved. He couldn't dislike Wilbur. In fact, the little man was very funny now, snoring loudly, at peace with himself for the first time in years. He'd get a real scare from the bread knife when he awakened to find it in his pocket.

White took a small, crumpled envelope from his pocket and shook a half dozen white pills into his hand.

"Sleeping tablets," he said. "One of these each nights before retiring will make Wilbur a quiet, loveable citizen for the remainder of his life. His mind won't be active enough to invent anything. He'll sleep like a log."

Adela looked so grateful that she seemed on the verge of kissing him again.

"I'll tell Maggie Jarvis right away. You'll send us a supply of these, won't you, Jeff? I'll personally make sure that Mr. Jarvis takes one each night before he retires."

He kissed her again, and continued doing so for some time. When she finally gasped for breath, he stared at her sternly.

"You'll do nothing of the kind, Miss Martin," he said, in his best professional manner. "We'll send Mrs. Jarvis a supply of the sleeping tablets. You're going to Chicago to become my secretary. It will be a relief to get rid of a certain buck-toothed

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

beauty who is now collecting her weekly pay check from me."

"I—really don't have to go so far for employment," she pleaded.

White looked shocked.

"I'm not going to live in Chicago, and let my wife work in Sandwich," he said in a hurt voice. "Now, do you or don't you?"

"Why didn't you say so?" She cried happily. "A girl can't let her husband starve on someone else's cooking!"

Wilbur Jarvis turned over comfortably in his sleep, placed both hands under his head and started to snore again.

"This is where we came in," White said, and took the girl gently but firmly by the arm. . .

THE END

SCAN AND SCRAM

by RAMSEY SINCLAIR

A FEW MONTHS ago we ran an article on the operation of a television set. We explained the various circuits, the cathode ray tube, the antenna and most of the other systems. We also explained how the picture is scanned within the tube—but alas, we explained it incorrectly—as many readers were quick to point out.

The way in which the needle-beam of electrons sweeps across the face of the cathode ray tube is this: imagine the face of the tube divided into five hundred and twenty-five horizontal lines. Starting at the upper left, the beam sweeps across the tube scanning *every other line*. It does this in one-sixtieth of a second. Then it goes back and scans every other line beginning with the second line. It also does this in one-sixtieth of a second. The time then for a complete "scan" of the "raster" is one-thirtieth of a second. In other words a picture or frame is gone over every thirtieth of a second.

It can be seen that since the tube-face is swept sixty times a second it is almost impossible to detect any shimmer or oscillation which is why that frequency is used. We never worry about the horizontal sweep because its frequency is so enormous. The technical aspects of television are so tremendous that we can't help but exhibit a certain enthusiasm for them. We are amazed at the commonplace attitude with which the average person regards this miracle of science. Very often you hear the expression; "it's o.k. but wait awhile—it'll improve wonderfully!" Of course it will, but as it is now, it is magnificent. Naturally color TV is coming. Naturally the resolution will be improved. Naturally the TV set will be simplified, and the prices will decrease.

All of these things will come. But right now, it is astounding to realize that anyone who wishes, at a comparatively slight expenditure can have in his living room, an eye on the world! Despite the pessimists, TV has caught on and when it is predicted that within five years there will be fifteen million TV sets in operation, we can sit back and realize that the bulk of the people know a good thing when they see it.

JET-PROPELLED AUTOS

by LYNN STANDISH

THE RECENT editions of newspapers have been filled with some unusual stories on a new invention to come out of Germany. It is said that some engineer has designed a practical turbine power plant for automobiles. If so, this would be great news indeed. Let us hope it is true.

The idea of a gas turbine for automobiles is not new. It has been proposed a number of times, but until recent years it has been a far-fetched idea. The development of alloys capable of withstanding high temperatures, the studies of jet and rocket motors, and the application of gas turbines to locomotives and planes and ships has revived hope that they may be applied to cars.

What is a gas turbine? A gas turbine is similar in operation to a conventional steam turbine which in turn is much like a water-wheel. The turbine consists of blades arranged around the rim of a wheel, the whole of which is encased in a housing. In a steam turbine, high pressure steam is admitted at a tangent to the blades and allowed to strike them, giving them an impetus and setting the wheel into

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

rotation. There is only one moving part and the device is extremely efficient. For example in almost all electric power plants, steam turbines are used to drive the generators because they are the most efficient of heat engines, far exceeding the Diesel, the gas engine, the reciprocating steam engine and other devices.

It has always been known that a gas turbine, operating like a steam turbine but depending for propulsion on burning jets of fuel like oil or gasoline, would be an extremely efficient device. The first practical gas turbines were used and made in Switzerland to drive locomotives. These were so successful that work is being done on these machines in this country. Gas turbines have grown up.

The war came along and with it, the gas turbine in aircraft. All of this experimental and practical work caused the high temperature alloys to be developed and consequently the gas turbine got far beyond the dreamers' stage. It is now a common reality in many fields.

For automotive use it would be wonderful. That is why, if the German engineer's announcement is true, he will really have something. Think of how complicated and subject to trouble, not to mention how inefficient, a gasoline engine is. But with a gas turbine substituted for the engine, a car would have many, many advantages. A gas turbine would be almost as smooth-running and as efficient as an electric motor. The only moving part would be the rotor itself into which the burning gases were fed.

A gear box and a clutch arrangement would undoubtedly be designed. This would not need be complex. The result would be a simple car, not subject to the myriad faults of our modern ones. The gas turbine is going to be one of the world's prime movers very soon, taking over from the gas engine and the steam turbine which have that honor now. And it is about time. We need some simple, efficient machine in this complicated world.

THIS'LL HAUNT YOU!

★ **by A. T. KEDZIE** ★

THE OLD haunted house is the accepted American version of things uncanny. You can find one in most every town, the favorite playground of the daring younger generation during the daytime—and a place just as equally shunned by them at night. And along these lines, while most adults may scoff at the tale of a particular house being haunted, few will, if the occasion presents itself, spend the long night hours in such a place!

The haunted house, of course, is nothing new. Every country has its superstitions of this type. They may be known by different names, such as: banshees, ghosts, poltergeists, djinn, and the like, but basically they are the same thing. An unnatural phenomenon that is supposed to produce chills to the spine.

It is interesting to note that certain types of haunting seem to be the exclusive property of certain families, the members of which seem to take a measure of pride in their dubious achievement. There is the death omen of the banshee; the family omen of ominous tidings belonging to the Oxenhams—a white bird; the drummer of Airlie; the Clan Gilzean's spectral rider; and the peculiar rapping noises of the Woodde family. Where these families might not have achieved fame in other matters, they certainly have become well known through their restless ancestors.

The activities of all of these "spirits" usually center around two mediums: the moving of a physical but inanimate object, or by producing some sight or sound of their own.

When they put on their own "show", so to speak, they may either represent actual places or persons, or in a symbolic way take the form of weird lights, shrouds, show up as a skeleton, or even as the last word—a coffin! They might even steal some of the classic thunder of Morley's Ghost and appear as a voice of the past, present, or future, warning in a hollow voice of dire things to come, unless...

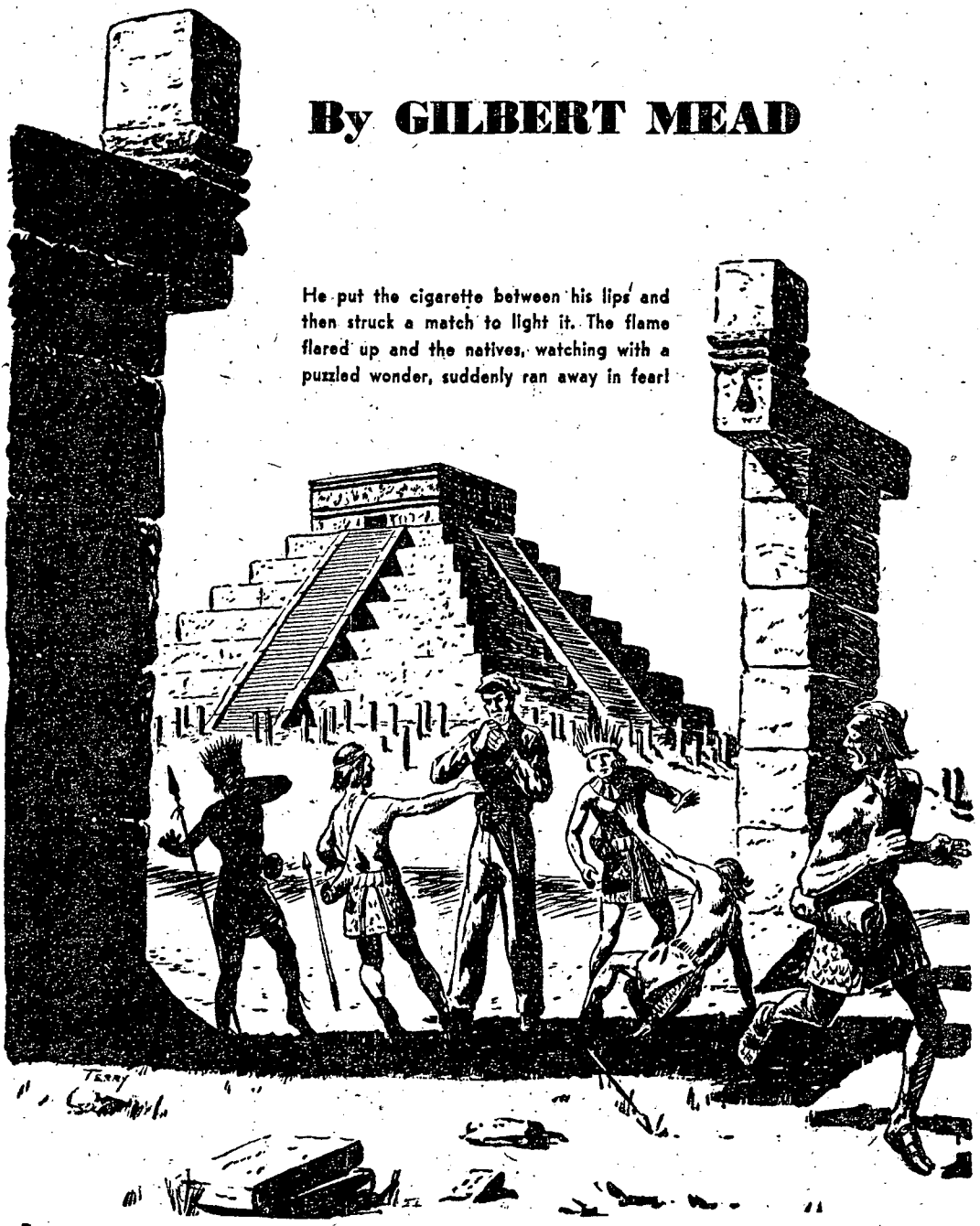
But there is one ghostie who it would appear haunts for the sporting sense of the business. That inimitable fellow is the *poltergeist*, taken from the German. Whenever furniture is rudely moved around, or the chandelier begins to sway without warning, you can almost bet that a mischievous poltergeist is somewhere in the vicinity. This particular ghost has seemingly allowed himself to become a somewhat domesticated haunter. Mediums pride themselves on their ability to call at will a cooperative poltergeist to a gathered seance.

But the upshot on all of the haunts, and all of the haunters, is that as yet, nobody seems to have been able to present concrete evidence of their existence. We are still waiting for some daring pioneer to come forth with photographic evidence of supernatural manifestation. It would seem that thus far the human eye is more discerning than that of the camera—which misses nothing in its scope, and records accurately anything it sees. Or is the answer simply that ghosts are camera shy? One guess on that score is as good as another...

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

The WHITE GOD of CHICHEN ITZA

By GILBERT MEAD



He put the cigarette between his lips and then struck a match to light it. The flame flared up and the natives, watching with a puzzled wonder, suddenly ran away in fear!

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

He had been standing waiting for a bus — as simple as that. But the next thing he knew he was in a strange land — and a God!

I HAVE BEEN a god. A tall, fair god with straight black hair and dark eyes. Sturdy and strong, with strange powers. The people who made me a god were beaten and broken four hundred years ago—beaten and broken because they believed the tales they and their priests made about me. The name they gave me is little more now than a word in musty reference books on dusty shelves.

I have read of myself in those musty books and know that the god is I. When doubt assails me, when sometimes I cannot myself believe in my godhead, I look again at the ragged scars I carry from barbarous battle. I remember my Chinta, loveliest of all the women I have known. I see the face and hear the voice of my blood brother, Mahnak, of my enemy Quatl, the high priest Kom, and then I am sure that Quentin Coates has indeed been a god.

It all began in the year 903, as nearly as I can estimate the time from the books. Or it all began in February, 1949.

It all began on the shore of a quiet blue lake in a hot and unfamiliar land. Or it all began in a watchman's shanty at a factory gate in one of Chicago's industrial western suburbs.

Outside, the ground was white with new snow. The wind cut cruelly, and I had stepped inside Jerry Pine's shanty to wait for my bus. Jerry and I had scarcely exchanged a dozen words when the blast struck. I heard no sound—there was not time, per-

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

haps, for the report to reach me. There was only a sudden, stunning impact. Then nothing.

When I opened my eyes, the white light burned them, and I closed them again for a moment. Gradually I grew aware of a hissing, whispering sound in my ears. My body was wet. The whispering came from little, impatient waves that climbed the graveled beach of a shining lake. The wetness was perspiration.

Slowly, I got to my feet. I threw off the heavy overcoat in which I had started to work. As I raised my left arm to get it out of the sleeve, I felt a sharp, twisting pain, as if the shoulder might have been hurt when I fell to earth. I dragged off my heavy arctics and dropped them both on the grass with the coat.

The lake was not large. I saw the line of green that marked its farther shore. A lone, large bird circled on motionless wings above the restless blue water, as if it sought a meal of fish from within the clear depths.

Behind me, a little way, great trees built a high wall beyond the grassy strip on which I found myself. Their branches, hidden under burdens of foliage, rose high against the heavens. In all my world were only lake and trees, sky and grass, and a bird and I.

I realized, suddenly, that I was very, very hungry. It had been my custom to breakfast in a coffee shop outside the place where I worked, and I had not eaten since the night before that fearful blast blew me out of Jerry Pine's shanty. I had not eaten since—well, since who knew when?

I TURNED toward the forest. The sun was hot on my head, and I discovered that I had lost my hat. I looked for it on the ground, but it was not there. Somewhere, between Jerry Pine's shanty and this unknown shore, my hat had vanished.

Under the trees I found a dim and pleasant coolness. Leaves made a roof through which sunlight could filter only weakly. The high, wide branches spread in vast arches, each fending off its neighbors, so that no tree could live too near another, and between the thick boles ran broad, peaceful aisles carpeted in grass. Because the sun could not break through, little undergrowth flourished, but here and there clinging vines clambered up the trunks of the trees, as if determined to reach for the light.

Some of those vines bore bright yellow berries big as Concord grapes. I plucked one, and had it half way to my mouth when a new, strange sound stopped me—except for the hiss of the waves, the first sound my ears had caught in this mysterious place. A bird song, it seemed, unlike any bird song I had ever known. And the perfect notes seemed somehow intended to send me a warning.

I stood for a moment, waiting vainly to hear that music again. I started the yellow berry once more toward my lips—and then the bird song rang sharply. In it, I thought, was not only warning repeated; the singer was actually scolding me!

The berry fell from my fingers, my mind convinced that the bird meant to insist I must not eat the fruit I had picked. And when I dropped that berry, the unseen creature sang again, in sweet tones of positive approval.

Then I laughed at myself. Not even in this strange land, surely, did invisible birds possess the power or take the trouble to warn men against unknown foods. I had to eat, and if those yellow berries were poisonous—well, unfamiliar foods were probably the least of the risks I must run before this adventure was ended.

Deliberately, like a small child who

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

performs a forbidden act to demonstrate his independence, I plucked a second yellow berry. Before I could pop it into my mouth, the unseen bird was scolding again, scolding angrily. I flung the berry from me.

Now the bird song was moving away from me, deeper into the forest, and I thought that its message offered an invitation. I took a step or two in its direction before the insanity of the whole affair struck me. I stopped, and would have turned back toward the lake shore, but the bird song sounded suddenly louder, as if the unknown creature were very near at hand, and I stayed where I was.

Once more the song moved toward the interior of the forest. The invitation its notes extended seemed clear as spoken words. I threw off all my misgivings and went where it led, on through the cool, green aisles between the trees. The notes I followed came at intervals, now close, now a little ahead, but always they took me farther from the lake shore. Once I heard the chatter of parakeets overhead. Another time I heard the jabbering of a troop of monkeys, and caught sight of some of them among the branches. Once I saw a great snake, thick as my arm, slither away through the grass not more than twenty feet from me.

Then I came into a wide glade where the blue sky showed clear above me, and grass, kissed by the sun, grew taller. Before me stood a girl with a basket of fruits hung over one dainty forearm. And when I appeared from under the trees she greeted me with the beautiful, mysterious bird song I had followed to this place.

The mind does not quickly adjust itself to such surprises. I stared at the girl for a time without really seeing her, and while I stared she watched me uncertainly. Then she beckoned me toward her, and I went. She sat on the ground, cross legged, and signed that I should do likewise. She pointed to the heaped, ripe fruits in her basket, and smiled.

I KEPT ON staring. I couldn't help it. But now, at least, I saw the glorious creature before me. Her skin was almost as fair as mine. Her hair was black, like mine, and her eyes, large and slanted a little, were brown. The lines of her lovely face were as finely cut as the image on a delicate cameo, and the curves of her small, perfect body held a powerful allure.

She offered me a tomato from her basket. I took it and ate. She gave me figs, and fruits I did not know. Several times she made attempts to speak with me in her mysterious, birdlike speech, and seemed disappointed that I could not understand. I tried the few languages I knew, but the sibilant syllables of English, the guttural harshness of German, even the soft Spanish speech, must have sounded rough and crude in her ears, and certainly she had no slightest idea of what I was saying to her.

But hunger is a language anyone can understand, and so, too, is laughter. The very failure of our efforts to get our thoughts across to each other in words and bird song gave rise to laughter, and soon we were happy together. I gave her my name and she tried to repeat it.

"Ken-*teen*," she sang. "Ken-*teen*." And her notes bore a startling resemblance to the quail's "Bob *White*."

She told me her name, then, and the best I could do in reproducing the sound was "Chinta." She smiled, tolerantly, as if she knew that I would never be able to come any nearer than that to her speech, and to this day, in all my thoughts, she is still Chinta.

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Our happiness did not last long. From the tall grass a dark figure sprang suddenly and leaped upon Chinta. Another leaped upon me. I shook off my attacker and tore at the body of the brown man who had seized the girl. I got my big hand about his forearm and twisted until I heard and felt the bone snap.

Then a dozen warriors swarmed over me, and I lay on the ground spread-eagled, with savages gripping each arm and each leg. In a ring about me stood many more, all naked except for breechclout and mocassins. Some of them carried wooden throwing spears, and all had bows with quivers full of arrows.

Close beside me, and a little apart from the others, as if he were a chief, stood a young man somewhere near my own age. He wore the same scanty garb as his followers, but his breechclout was richly worked with brilliant feathers and he carried, strapped to his left arm, a small round shield with some device worked upon it. The young chief looked down at me, and his mouth wore what seemed almost a friendly grin, but if he felt any friendliness, at least he made no attempt to restrain the cruel contortions with which his warriors forced me to my feet and led me toward the distant end of that forest glade. He offered no opposition when they threw me on my back again and bound me there with leather thongs tied to stakes driven into the ground.

THE SWIFT tropic night had fallen when I was taken to face the council of braves. Where Chinta might be, I could not guess. Two warriors led me—my hands still tightly bound—before the assemblage, where fifty men or more sat in an arc. Between them and me, wood had been heaped. An upended length of log stood between the fire and me, like an improvised altar. Above us, an early rising moon and a thousand stars provided light.

A young warrior knelt beside the heaped wood and went to work with what appeared to be a stick about which he had looped a bowstring. Working the bow back and forth twirled the stick, the end of which rested in a hollowed block. A tiny glow appeared, and the warrior blew it into a little flame. Seconds later the pile of wood blazed.

The firelight gave that forest glade an eerie, ghastly air. On every side the trees raised up a black, uncompromising wall. The warriors' faces, side by side in a semicircle, wore no expression I could read. I heard no sound but the crackle of burning wood and, once, the sharp, disturbed cry of some unknown night bird.

Then I saw that I was not the only prisoner upon whom these warriors had gathered to pass judgment. Perhaps ten yards to my left another man stood, as I stood, between two guards. His skin was as brown as that of our captors. Like them, he wore only breechclout and mocassins. His face, like their faces, told nothing of the thoughts that passed within his mind. I saw only one mark that set him apart from these others: His face and torso were painted with streaks of black and red pigment: our captors' warpaint was all black.

From somewhere behind me, a new figure appeared—an old man with skinny arms and seamed face. Brilliant feathers had been laced into his long, black hair, and he wore over his nakedness a robe on which intricate geometric patterns had been worked in other gay-hued feathers. Slowly the old man advanced to the crude log altar. For an instant he rested his hands on the top of that log and seemed to bow his head. Then he

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

lifted his thin old arms as if in supplication.

Priest, I decided. Priest of some heathen god, among a people where priests wielded dangerous power.

Then the priest began to speak in a harsh and almost guttural tongue. He used one bony hand to point to my fellow captive. He pointed to the altar before him. He pointed to the heavens above him. His voice rose in a volume amazing for one of his obvious age and meager body. His words ended abruptly, in a question.

Among the warriors one man rose. His words held none of the fiery passion the priest had shown. Once he appeared to make some inquiry, which another warrior stood long enough to answer. Then the speaker went on in a matter-of-fact tone for a moment more before he resumed his seat.

From the darkness behind me, four more men came. They came slowly, and their bodies, their faces, their arms and their legs were painted a solid, garish blue, so that only their eyes and their hair showed dark against the paint. They glided toward my fellow captive, but if he saw them come—if he guessed their purpose—he gave no sign.

THE BLUE devils seized the hapless fellow from his guards and lifted him off his feet. They carried him toward the altar, where one of them slashed the thongs about his wrists. Then, with one man at each ankle and one at each wrist, they threw him on his back across the altar—an altar arched, I saw, to stretch the victim's chest and abdominal muscles for the priest's foul work.

The aging priest paid no heed to the man on the altar. He lifted his arms again in some pagan prayer. Arms fell, and prayer gave way to a singsong chant. The chant ended. One hand rose, and in its grip I saw a knife, painted blue like the bodies of those four warriors.

The knife fell. Its point struck true between two of the prisoner's ribs, and the victim's body protested with one convulsive shudder. The priest drew the sacrificial blade toward himself through still living flesh. Then he thrust his clawed left hand into the wound, through spurting blood, and when the hand emerged it held a man's yet quivering heart.

The priest held the heart aloft for all to see, and blood dripped from heart and hand. It ran in rivulets along the skinny arm. Then the old man dropped the heart into a waiting basket, as one who slaughters a pig may cast aside offal. The four blue devils raised their lifeless victim from off the altar and bore him away. Slowly, with a strange dignity, the priest followed, beyond my range of vision.

A sudden stir of moving bodies betrayed the fact that every warrior in that watching circle had sat tense as compressed springs through that brutal ceremony, but still no one spoke. The sight of a brave man's death beneath a cruel priest's knife had held them enthralled, but it had not horrified them as I was horrified. I felt sick and weak inside, but not they. I wanted to vomit, and they—they were drinking in turn from a huge gourd or bowl that was passed from hand to hand.

I felt sick and weak—yes—but this, I knew, was no time to yield to weakness. It seemed obvious that these brown savages meant to claim another victim before their council ended, and my mind grew busy with schemes for escape from that terrible fate. My bound hands would be of little use in a fight for life. How, without my hands, could I hope to

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

win?

I began to study the lay of the ground and measure the chance of flight. I studied the guards beside me—and realized for the first time, I think, what small men they were. Neither of them—not one; indeed, of all that band—stood within a foot of my six feet two. I must have outweighed any warrior there by not less than eighty pounds. But how I might use that advantage, I did not yet know.

The priest returned without his blue devils. The blood, I saw, had been washed from his arms and hands; now they were ready to plunge themselves into my life fluid. And in that instant I knew how and when I would make my bid for freedom. When the four blue devils cut my bonds, I would fight them off and run for it. I would—but what of the girl whose speech was the song of birds? What of Chinta? Suddenly, I was not so sure that I would run away until I had found her.

THEN THE priest was at his invocations again. Again he was making his plea to the gathered warriors for sacrificial blood. For my blood. I saw his bony finger aimed at me. I saw him point out the altar on which I must die. I saw him point to the heavens where dwelt his gods. Again his demand for the life of a victim rose in a shrill, frightening crescendo.

Again, a warrior arose to speak. He carried one arm in a rude splint, and I knew that it was he whose arm I had broken. The priest had shrieked his plea with religious fervor; this man spoke bitterly, as if only my death could salve his wounded warrior pride. His words I could not know, but his snarling tone defied misunderstanding.

The speaker resumed his seat. For one long, slow second there came no sound but the hiss and crackle of burning firewood. The rite that preceded my fellow prisoner's death had been repeated now for me. I tensed my muscles, ready for the test that must quickly come.

But now another man stood in that council. He strode to the center of that human arc, and I saw that he was the young chief. The shield with its strange device was missing, but I recognized the feather-decorated breechclout, and I thought that the gaze he turned on me for an instant held something of hope and promise.

The chief took his stand behind the log altar, and the old priest had to back away to give him room there. The chief began to speak in that same harsh tongue the others had used, but somehow it seemed (the wish may well have fathered the hopeful thought) that he spoke less fiercely. I could not understand his words then, of course, but now I know them. You'll find them written in one of the Aztec tales modern science has unearthed. I have read them there, and remembered them exactly.

"I am Mahnak. Ah Mahnak, *cocom* of the Aztecs. In council I have spoken wisely, and in battle led you well. Even so my father counseled and led your fathers, and just so his fathers before him counseled and led your fathers' fathers. If there be among you one who aspires to lift his spear or his knife against me, let him step forth. Let every warrior here see battle fairly fought."

The young chief waited. He swept that human arc with his insolent, challenging gaze, but no man arose. None spoke.

"It is not my way to seek to direct your judgment in council, unless I can see that some there are who would lead you astray with evil,

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

foolish words or stupid, bloody lust.

"This *nacom*, this aging vulture, this foul slaughterer of men he would not have dared to face in his strongest youth, demands the blood of this strange white giant on the altar of Miclanctecutli, the death god. The sub-chief Quatl supports him.

"The *nacom* speaks with the lust of a priest for the power of his office. Quatl speaks with the lust of his anger and his tarnished pride because the giant snapped his sturdy arm like a small, dry stick between his fingers. If these be reasons enough to lay the white giant upon the altar and tear out his heart, I have other, better reasons why he shall not die tonight."

THE WARRIORS listened in silence. If any agreed with the chief, his face did not reveal it. If any agreed with Quatl and the *nacom*, no face gave notice.

"We come now into a strange, new land known to us only through the tales of a wandering trader or fleeing slaves. We come to make this land our own, and our little band is but one of thirty parties moving hither. Our little knowledge tells us that this new land is peopled by men like ourselves, men such as he whom we have given already tonight to the gods. Who among us had heard before today of a race of giants with pale skins, to bar our way?

"It was meet that we sacrifice the Mayan warrior. Him, we had no cause to fear, except that, living, he might escape and warn his people of our coming. The Mayan was brave, and his death will delight the gods who glory in courage.

"But this white giant is strange to us. He speaks with a tongue that none among us can understand. In all the known world lives none like him. He wears a garb of stuffs our women's looms can never make. His mocassins are such as our women could never shape. Whence came he? What knowledge is his, and what strange power, that we might make our own if we keep him among us?

"What say ye?"

Mahnak did not go back to his place in the front row of the council. He stood, facing his followers, awaiting their judgment. He stood while Quatl spoke again—as a chief may justly stand when lesser men claim an audience. Quatl struck out bitterly against his chief's advice. The *nacom* spoke again, and still Mahnak remained standing. Then Mahnak called upon the warriors to declare their judgment—and in their howl for blood I heard my doom. A grim smile of satisfaction flitted over Quatl's face. The *nacom* strutted. The four blue devils reappeared. They seized me and lifted me off my feet, and I did not resist. The *nacom* strode to his altar, ready to repeat the ritual of sacrifice.

But Mahnak did not yield place to the priest. The young chief stood his ground. He lifted both arms to claim the warriors' attention again. The *nacom* hesitated. The blue devils held me suspended among them.

"I am Mahnak," the chief said again. "Ah Mahnak, *cocom* of the Aztecs. If any man here dare disobey my orders, let him answer to all the chiefs of the Aztecs. The white giant shall not die. Strike off his bonds!"

For seconds more the blue devils held me between earth and sky, between life and death. Then the men who held my feet released them, and the other two swung me upright. One of the warriors who had served as my guards used his flint knife to cut the leather thongs with which my wrists were tied, and I felt stinging pain as the freed blood flowed into

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

my hands again.

Mahnak had won, by his boldness. I was alive, because he wished it. But the scowls on the faces of Quatl, the *nacom*, and others there that night were warning enough of trouble to come.

I SLEPT that night beside Mahnak, on the warm grass. The chief kept me with him, partly, I think, because he wished to find some way to talk with me, to learn who I was and whence I came and why I wore the strange garb I did; partly, too, I am sure, because he meant to preserve my life against treachery.

Mahnak wasted little time, however, in efforts at talk. We found no common ground of communication, and the Aztec rolled on his side and slept. I lay awake for hours, listening to Mahnak's steady breathing, hearing the whisper of a gentle breeze through the long grass, the occasional cry of a bird or a beast in the nearby forest. I listened, too, for the sound of Chinta's song-like speech, but it did not come.

The warriors were up with the early dawn. We breakfasted on a dried meat I did not recognize, on birds' eggs, on a bread made from cassava root, and washed our food down with a beverage very like tea. I supposed that we should be soon on the march, and wondered why Mahnak did not give the order to move.

I was soon to find out. Scarcely had we finished our meal when two warriors came to me, and Mahnak indicated that I was to follow them. They led me to where the council had met a few hours earlier. The crude log altar was gone, and only a few brown stains on the grass showed where a young man's life blood had fallen. Only brown, seared grass and black rubble showed where a fire had burned.

Now a young warrior awaited my coming on the council ground. He eyed me as curiously as I eyed him. He carried no arms, but as soon as I appeared, another warrior came forward with two light throwing spears. The spear bearer offered the weapons first to me and signed that I was to choose one.

I shrugged the offer aside and signed that the young warrior was to have first choice. Obviously, I was to undergo a test of some sort. This Aztec was to be my opponent. I knew nothing of spears; what difference could the privilege of first selection possibly make to me? Yet giving up that privilege did make a very real difference, I saw soon enough. My gesture had strengthened Mahnak's hand with those who already approved the preservation of my life. It weakened the opposition of some of those who had sided with the *nacom* and Quatl.

At a distance of thirty yards, perhaps, a target had been set. One warrior—a sort of judge or referee—drew a line on the ground with a heavy stick. My opponent stepped back a short way, measured the range with his eye, and ran forward in three long strides. He hurled his spear as his right foot stopped just short of the foul line. The weapon sailed through the air. Its flint tip struck the edge of the target and knocked it over.

A murmur of quiet approval went through the ranks of assembled warriors. I took my weapon, then, and weighed it in my hand to find the point of balance. The spear appeared to be eight feet long. It weighed, I guessed, less than two pounds. I eyed its length and found it true and straight.

I took three long steps back from the line, tried to gauge my target

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

range—the shield, or whatever it was, had been replaced—and ran forward, the spear held just above shoulder height. I let the thing fly, praying that my skill at darts, picked up in an English pub, might help me now. The unfamiliar weapon hit target fairly and stuck there, quivering. I tried hard not to betray my surprise and elation, but some of the watchers grinned openly. Others scowled. The warrior I had beaten praised my skill —or my luck!—with a quick, frank smile of admiration.

MY TRIAL was not over. A new opponent appeared. It was clear that a champion in each warlike art had been picked to meet me. The target was moved some fifteen yards farther, and at that distance it looked small, indeed. The man who had proffered the spears came forward with two bows and six arrows. Again, he gave me first choice, and again I declined.

I watched the bold young Aztec test his bowstring. I watched him while he carefully studied each arrow. Then, with his left foot not an inch from the foul line, he set an arrow against the string, drew it back with thumb and forefinger till the feathers almost touched his shoulder, and let go. Twice more he shot.

His first missile skimmed the top of the target so closely that one of three bright feathers with which it was winged broke against the rim of the shield. The second struck near the edge and rocketed into the grass. The third dug into the wood of the target and stayed.

I accepted my bow and arrows more confidently than I had taken the spear. During the war I once had a commanding officer who went completely nuts on archery. Sooner or later, every pilot in that happy squadron had to take his turn playing Indian with the C.O., and I found fun in being able to shoot with no slightest risk that someone might shoot back. I got to be good at it, too.

My bow was maybe five feet long, and skillfully fashioned. The string had come, I guessed, from the muscle fiber of some wild animal. It was fixed in place with clever knots at tiny nocks cut into the tough and pliant bow wood. The arrows may have been twenty-eight inches long. Flint tipped like the spear, they looked as similar as three lengths of rope from the same coil.

Like my Aztec adversary, I tested the pull of my bowstring. I balanced each slender arrow. I glanced again at the target and measured the range with my eye as best I could. Then I set my arrows to the string in swift succession and sent them on their way.

One hit the edge of the target and ricocheted into the grass, as the Aztec's second arrow had done. Another plowed into the wood, about as far from the center as my opponent's best. My third arrow struck the very bullseye.

Once more, I strove to conceal my elation. Once more, there were some among the watching warriors who applauded, in silence, my victory over their second champion. Once more there were those who scowled, and the Indian I had just defeated was one of these.

I was prepared for the revelation that I should be compelled to face a third Aztec champion in some test, but I did not guess how deadly it could prove, until a warrior came forward with new weapons. Knives, this time. Flint knives, with blades set into bone handles corded with vegetable fiber to give a firm grip.

My third opponent made his choice of the two knives when I, for the

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

third time, declined the privilege. The warrior who seemed to be master of ceremonies tried to explain, by signs and gestures, the rules of combat. He showed me how we must stand, instep to instep, so that our bodies were barely two feet apart. He indicated that either man might use his empty hand as well as the knife in any way that offered—except that one might use that empty hand only against his opponent's knife arm. The combat would end, he made me understand, only when one man lost his knife in defeat—or in death.

THIS WAS something I should not have bargained for, if the choice had been mine. My size, I feared, would be a handicap, not an advantage. My vitals would be within ready reach of a shorter man; his would be too low for me to get to easily. My longer arms would avail me nothing; compelled to stand so close together, both combatants could strike at will against the other's body unless the blow was parried. And the use of knives was something this Aztec had known all his life. Knife fighting has never been a sport among normal young Americans.

But there was nothing I could do except to meet the challenge thrust upon me. My opponent and I took our stance. The master of ceremonies raised his right hand. When it fell, the fight would begin.

The hand fell. My foeman's knife lashed out. I twisted away, and the blade slashed only my woolen Army shirt. I struck once, awkwardly, and the Aztec deflected my attack easily with his own blade. Again he aimed a blow at me—but now I knew what I would do. With my left hand I seized his wrist and squeezed until his numbed fingers freed the knife. With left hand and left shoulder I lifted the little man off his feet and flung him behind me onto the ground. The fall knocked the wind out of him, and he lay a moment before he could scramble erect. I threw my knife at the feet of the nearest warrior. My shoulder ached almost unbearably.

This time I saw more who approved my conquest, fewer who scowled. The aging *nacom*, however, and Quatl of the broken arm made no attempt to conceal their angry disappointment. To them, and especially to Quatl, I was an enemy to be destroyed. If necessary, those two, I realized, would risk even a clash with Mahnak's leadership to get at me because I had thwarted them and beaten their champions.

I had begun to like the Aztecs, for all that they had sought my life on the altar of sacrifice. I could not know then how very soon the call of fate would make me their principal foe, nor how great a part the bitterness of Quatl must yet play in my own strange destiny.

Unwittingly, then, I did a simple thing calculated to determine, in large measure, the yet unborn history of whole nations. I had not tasted tobacco since I found myself on that unknown lake shore. Possibly, the tension of those hours had made me forget that I wanted a smoke. I stuck my hand into a shirt pocket, drew out a packet of cigarets, and stuffed one of the paper cylinders into my mouth. I reached for a book of paper matches and struck a quick light.

NOT MORE than five men saw me strike that match. Their dark eyes bulged. Some of them sucked in their breath in startled amazement. One let out a sharp cry of actual fear. I held the flame to my cigaret and drew smoke gratefully into my lungs.

I shook the match to make sure it

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

was out, and would have tossed burned stub away, but Mahnak asked me for it. I passed it over—and realized with a sort of shock how much the mystery of that match might be made to help me among these people.

The Aztecs knew and used tobacco; my cigaret merely aroused their curiosity, because it was wrapped in paper, which they had never seen. They smoked rolls of tobacco wrapped in a single leaf, ancestor of the white man's cigar, or stuffed tobacco into pipe bowls fashioned from native clay.

The match it was that dumbfounded those warriors. They made fire laboriously, with sticks, as I had seen one of them kindle a blaze the night before, or by striking two flints together. And I, the strange white giant, made fire in an instant with a flimsy bit of some mysterious substance that burst into flame at a touch.

Mahnak accepted the match stub and held it gingerly in his brown palm while he studied it. He poked at the thing with his broad, short forefinger, and turned it over to look at its other side. He peered at the charred end, at the black head still clinging to it, and asked some question I could not understand.

The other warriors who had witnessed that miracle clamored to see the magic stick, and Mahnak let them look at it there in his hand, but would not permit them to touch it. Then he wrapped the charred thing in a leaf, tenderly, and put it into the buckskin pouch he wore at his waist. Black eyes followed his actions with obvious respect and envy.

But now the news of my magic had spread through all the members of that band, and dozens of them clustered about me, demanding to see for themselves the miracle of sudden flame. I took out the match book and struck a second light. I let the paper burn for a moment before their eyes, ere I pinched the blaze between my fingers. Twenty hands reached out to beg for the stub, and I could not decide where to bestow it.

Mahnak solved that problem for me. With a quick, peremptory gesture he signed that I was to give it to him as I had given its mate. He opened his pouch, wrapped both matches together, and returned them to their place.

That made me think, fast. Mahnak, apparently, knew better than I how much capital might be made of the strange, miraculous power I had displayed. He understood well the sales value, in goods or loyalty, of miraculous relics; priests of his time engaged in that traffic as avidly as priests of later ages might do. And Mahnak meant to be the sole source of those relics. He meant me to realize, too, that I lived at his sufferance, and that any personal loyalties I might win must come to me through him. Mahnak was boss of those Aztecs, and he meant to remain boss. He had not raised me up—almost literally from the sacrificial altar—to let me take precedence over him among his own superstitious followers.

I grinned at the young chief, and nodded my head to let him know that I understood all his purpose. He studied my face, as if he sought there proof that I contemplated no treachery. Then he extended his hand and grasped mine, as any American of 1949 might do in recognition of a compact. He drew his knife and opened a vein in his forearm. He opened a vein in mine, and we let our blood flow together. I knew well enough what I did; I had taken a willing part in that rite, witnessed by many warriors, and, partaking, had bound myself in a brotherhood which I could never in honor deny.

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

BUT MAHNAK had done more than just that to declare me his brother. The chief was a shrewd politician as well as a brave man and a capable leader. He had reasserted, in that little ceremony, his determination to protect me. He had flung a new and daring challenge at those who would undermine his leadership by attacks upon me. And by that act, though we could none of us have known it then, the Aztec had set the seal of fate upon his own doom.

I remembered suddenly that I had left an unopened packet of cigarets and two full books of matches in the pocket of that overcoat I had dropped in the grass at the lake shore. With me, I had yet twelve smokes and nine matches. The cigarets meant little or nothing, beyond their power to satisfy my hunger for tobacco, but those matches were forty hostages to fortune. In my hands, they were priceless. If any other should happen upon them and learn the secret of their use, he could prove himself more than four times as powerful as I because he would possess more than four times as many proofs of his power.

Somehow, I had to get back to that shore and recover those matches. I had to do it soon, before some wandering Maya, or some keen scout sent out by the Aztecs, should happen upon my discarded treasure. I did not know it then, of course, but in a strange and fateful way, every act of mine, every decision I came to, in those days, was to have its ultimate part in the destiny of nations.

As quickly as I decently could, I drew Mahnak aside and tried to make him understand, without revealing too much, that I must leave him for a few hours. He grasped my meaning readily enough, but his eyes betrayed his doubt of my indicated promise to return. I showed him the fresh wound he had made in my arm with his knife. I showed him the blood dried there—some of that blood his own. I pointed out the similar wound he wore, and a light of apology, almost of contrition, replaced suspicion on his face. He waved his hand at me, and I was gone. Two warriors saw me go and set up a shout after me, but Mahnak called them back.

I was very sure that I knew the way I must go. I entered the forest at the very point where I had emerged from it to see the lovely Chinta waiting. Chinta! I knew a twinge of shame; the girl had been little in my thoughts, for all her loveliness, and I could not know what fate she might have met in these last eighteen hours.

Eighteen hours! Had the time been so short, then, since those Aztec warriors had pounced upon us as we ate? Was it so recently, then, that I had first heard her songlike speech, warning me not to eat a yellow berry? So brief a span since I had stood in Jerry Pine's shack, waiting for a Leyden bus to come? I looked at the watch on my wrist and knew that the hours had, indeed, been few. Well, the fates of men and gods had been decided in less time, during the whirl of man's earthly history.

And that, strangely enough, was the first time I had glanced at my watch in all those eighteen hours! I wound it, and found it almost completely run down. The excitement of unaccustomed adventure, it seemed, could upset the oldest established habits. Now, thinking of the cigarets and the watch, I realized that my faithful timepiece might be used to help me among these Aztecs, and began to plan ways to achieve that end. And in my shirt pocket, too, was a fountain pen. What potent weapons!

THE WAY through the forest was easy. It led straight through the

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

wide, grass carpeted aisles for perhaps three miles, and opened out on a strip of green that bordered the lake. I saw the blue water, and looked, almost instinctively, for the bird I had first seen circling there. But what I saw was a brown body straightening up from a bending posture. Over one arm he carried my overcoat, and in his other hand he held my heavy arctics.

I raced across the fifty yards or so of open grass. The Indian heard me come and whirled to face me. He let my garments fall. There was no time to bring into play the bow slung across his shoulder, and that, too, he dropped to free his arm. He plucked his knife from his waistband and waited to meet me.

But this was not an Aztec who had trailed me, then hurried around me to snatch my treasures from under my nose. Somehow, that was what I had supposed at sight of him. This man's body paint was black and red, like that of the warrior I had seen sacrificed. A Maya, then. One of the nation whose land my Aztecs had come to invade. Perhaps, by some means of their own, the Mayas of Yucatan had learned of the Aztecs' coming. This might well be a scout sent out to investigate, who had happened upon my belongings by chance.

If the vision of a strange white giant surprised or frightened the Maya, he gave no sign. With that knife in hand he waited for me. And I knew that I had no choice except to attack. I had to have that coat, or what it held. The Maya seemed to realize that what he had found was mine, that I had returned to claim it, and that I would surely fight to possess it. He stood there, waiting.

Then I remembered that I had come away from the Aztec camp unarmed—unless you might call my pocketknife, with its two inch blade, a weapon. I did not bother even to reach for the puny thing. But I did have a plan quickly conceived. Already that day I had bested one man with a knife, and now I would have to repeat the feat.

I circled the warrior slowly, like a wrestler seeking an opening, and made him circle with me to keep me from getting at his back. Twice I darted in, feinting, and once he lunged toward me with that murderous flint blade. Then I dived at his knees in a football tackle. The fellow went down, but I was under him, and he plunged that knife of his into my ribs.

I still had his legs. I used my weight to roll him off me and bring myself on top. The rest was easy. I used one hand to pin his knife arm. I used the other to throttle his throat, until his struggles weakened but he was not quite dead. I threw him onto his belly, brought his hands behind his back, and tied them there with a strip of my undershirt. I picked up his fallen knife and stuck it into my belt. I grabbed my coat, pulled out those precious cigarets and matches, hoisted the warrior onto his feet and prepared to return to the Aztec camp.

A second man jumped me. He came from nowhere. My flesh felt again the bite of a cruel flint blade. Pain numbed my strength. Blood soaked my shirt anew. I found time to wonder why my attacker had not found a vital spot and decided that some sudden movement of mine had defeated his aim. His point had pierced my left shoulder. I felt it strike bared bone.

I swung my right arm behind me and caught the fellow alongside the head. No such awkward, unaimed blow could achieve much, but it did throw the man off balance. I whirled and seized his knife hand. I squeezed the weapon out of his fingers.

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

My left arm was almost useless, but I wrapped it about the Indian's torso. Before he could break loose, I jerked his body close against mine with my good right arm. I hurled myself off my feet and took my foeman with me. My two hundred pounds smashed him flat against the earth.

My second victim was not some comrade of the Maya, come to his aid. The man beneath me was that Aztec warrior whom I had bested with the bow. I had broken his neck.

I had what I had come to find. I had those forty paper matches, symbols of hopeful power.

But also I had killed an Aztec, and not even Mahnak's blood brotherhood could countenance that. Yet I was bound by my promise to return to the Aztec camp, and soon or late this Aztec's death at my hands must be revealed. The prospect was not pleasant.

TROUBLE DOES not wait long to enter, when a door is opened to her.

My return to the Aztec camp with a Maya prisoner was greeted with joy. The fellow was kept until evening, for the calling of a new council. The log altar stood in place. A new fire blazed. The *nacom* went through his antics and made his demand for blood.

I should have known, I suppose, what fate that Maya faced before I brought him there a captive, but I had not considered that angle, at all. And Mahnak did not help, although he obviously believed that he was helping me, plenty. The young chief got to his feet when the *nacom* finished speaking. He faced that solemn arc of warriors confidently, almost mockingly.

"One short sun ago I stood here commanding life and freedom for the white giant. Some there were who would have defied my wishes, but I am *cocom*, and you are Aztecs, and the giant lives. Today the giant brings us a captive from among the people whose land this was before we came... A warrior. An enemy. The giant has vanquished the Maya as easily as he broke great Quatl's arm. And now he offers this Maya in his stead as a sacrifice to our gods."

There was nothing I could do. I guessed what Mahnak was saying as well as if I had known every word, and there was nothing I could do. I had no knowledge of the Aztec tongue, that I might protest against this inhuman barbarity. And I could not hope to withstand, alone, the vengeance of that warrior band if I should try to save the Maya by some device of trickery or claimed power.

And I owed my very life to Mahnak, who had in that moment approved the Maya's death under the nacom's knife. Mahnak thought thereby to make my position among the Aztecs more secure; I knew that. He thought to strengthen his own hand against those who might ally themselves with Quatl. And he could not possibly have known how the death of that Maya prisoner would sicken me.

Yet I could not let the Maya die. I knew that, too. I knew that I must try to save him, somehow. Not even my blood brotherhood with Mahnak could conquer my violent hatred for the thing which he and his warriors were about to do.

I began to take stock of myself. Mahnak had bound my knife wounds with a coarse, unbleached cotton cloth, after smearing the torn flesh with some native ointment that seemed to possess amazing power to soothe the pain and restore my strength. My left arm would be of little use for days to come. In any

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

fight, I should have but one good hand—that, and my size, and the superstitious awe engendered by my size, my white skin, and my strange clothing. All these I should have on my side—all these, and forty-nine paper matches, one fountain pen, and one watch.

Against me were ranged an aged priest and almost sixty bold, brave fighters, with their bows, their spears, their knives, their knowledge of the forest, and the fervor of their cruel religion. Mahnak would sanction anything his warriors and the priest might choose to do, now, if I should try to save the Maya and fail. He would consider my actions a violation of the brotherhood he and I had sworn in our mingled blood, and his bitterness toward me would certainly be more intense than that of any other. His own position as chief would be at stake—his prestige as warrior as well as chief—and probably life itself. For me, if I failed, there could be no hope of mercy, no repitition of the miracle by which I had once been saved from that sacrificial altar.

I had two knives—one taken from the Maya when I captured him, and one from the Aztec I had killed.

QUATL WAS speaking. From his tone I knew that he was agreeing to the sacrifice of the Maya. I knew, too, that he was declaring the Maya's blood a feeble substitute for mine.

The four blue devils appeared from out of the darkness. They seized the hapless Maya from his two guards and carried him slung between them. At the altar, they stood him on his feet for an instant, and one of the four cut the thongs that bound his wrists.

I stood. I strode to the altar. The eyes of every Aztec followed me, and some men muttered angrily, but no one arose to block my progress because none there could have guessed my purpose.

I turned to face the seated warriors, as if I wished to address them, and every man waited, curious, perhaps, to learn what I proposed to do or to say. I glanced about me. The blue devils stood not more than ten feet away, two of them grasping the Maya's arms, the other pair immediately behind him. The *nacom* swung toward me, his face black with rage at this presumptuous interference.

I sprang. I smashed my good fist into the face of the painted devil at the Maya's right, and the fellow went down. In that same instant I hooked my arm about the Maya's body, lifted him clear of the ground, and ran for the shelter of the trees.

I set the Maya down, and he ran with me. Close behind us came the three remaining blue devils and the two men who had guarded the captive. The rest of the band had all been seated when I made my dash, and the nearest of them had been at least ten yards away, so that I had a good start on all but five of my pursuers. And my legs were long. Weakened by my wounds, I could yet outrun any Aztec for a little while. The Maya was fast, too; fear and the new hope of life lent speed to his short brown legs.

We reached the trees, and under their cover the night was utterly black. Behind us came the rush of moccasined feet and the bitter cries of cheated men. I could not see the Maya, but I knew that it was he who grasped my wrist and led me sharply to the right, then stopped short after a few strides.

That simple trick seemed to work. We heard Aztec warriors race past us along the forest glade we had been

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

following a few seconds earlier. How many of them went that way I could not know, for I could no more see them in that blackness than they could see us. In any event, when they did not find us, the Aztecs would certainly return, and it seemed only reasonable that they would fan out in a new search. If we were still free at dawn, they would take up the hunt again, using their jungle skill to trail us across the forest's grass carpet.

Then I remembered Chinta, whom I had not seen since the Aztecs had captured her and me. My thoughts brought back every line of her lovely face and her perfect body, brought back every tone of her beautiful speech, so like a bird's song. And I could not have gone on, then, without some attempt to rescue her if still she lived.

I have always had an excellent sense of direction, and now it was easy to head back toward the Aztec camp. The Maya seemed to think me lost. He tugged at my arm and tried to lead me deeper into the forest, but I shook him off, and when he saw that I meant to return to the glade, he glided silently beside me.

WE DID NOT enter that open area when we reached it. We stayed among the trees and began a circuit of the place. Not more than a dozen warriors appeared to be still there—left, I supposed, as a guard. They were lounging in two groups, talking. Apparently, they did not hear us as we slipped from tree to tree, outside the range of their firelight and their vision.

Then we found what we sought. Off at one side, some forty yards or so from the blazing fire, a lone warrior sat, arms clasped about upthrust knees. He was watching his comrades. Close beside him, prone upon the ground as if her hands and feet were tied, lay the strange and lovely girl. I saw her delicate face in the light of the high moon.

I should have preferred to leap upon the man, throttle his throat, bind and gag him, and leave him there, but this was no time for twentieth century squeamishness—and I had only one useful arm. I flattened myself in the tall grass and crawled toward the guard on my belly. I got within six feet, behind him, before he heard the sound of my coming and turned his head as if to identify the slight noise I must have made.

In that instant I sprang. In my right hand I held my Aztec knife. The flint blade struck his throat fairly, and a fountain of wet and sticky blood washed my hand. The warrior gasped once, with a gurgling, choking noise in his throat. Then he collapsed and lay still. I glanced toward the two small groups of men near the fire, but they had seen and heard nothing. I slashed Chinta's bonds, and together we crawled back to the comparative safety of the trees. The Maya was waiting there.

I began to believe that doubling back to the camp had been the best thing I could have done to throw the Aztecs off my trail, as well as to rescue Chinta. She moved lightly beside me, and once or twice I felt the gentle pressure of her fingers on my arm, as if she sought to convey some message.

The Maya stayed close, too, but it was he who took charge. He led the way into the forest at a right angle to the direction in which he and I had first fled from the scene of planned sacrifice. Then he swung to the right and continued the easy, yet swift, pace he had set. I marveled that Chinta kept up with us, but she seemed to do it without tiring.

I glanced at the luminous dial of my watch. Five minutes past eleven.

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

It was almost exactly two hours since I had snatched the Maya from priest and blue devils.

Now, the trees seemed to thin abruptly, and beyond them, off to the right, I saw the sheen of water. That would be the lake beside which I had landed in this strange country and age, beside which I had captured my Maya guide and killed an Aztec. And we were on the opposite side of that lake, hurrying eastward.

We did not speak. No one among us could have understood any word the other two might have uttered. American, Maya brave, and strange maid from no one knew where, we kept on a way that only the warrior knew. I wondered where we were bound, and whether or not I should ever again have to face the wrath of the Aztecs.

WE TRAVELED all that night and half the next day before the Maya would let us rest. Then he kept watch while Chinta and I slept. Later, he wakened me and lay down to snatch a few winks himself, before we resumed out journey.

Our only food was wild fruits which the Maya found for us, and I had to grin when I saw that our viands did not include the big yellow berries the bird song had warned me not to eat. We drank brackish water from a *cenote,* a natural cistern formed where the limestone, which underlay the soil, had subsided and made a catch basin.

I tried to find some means of communicating in words with the Maya and Chinta. I gave him my name, and he gave me his. Ah Kom Tzohom. I pointed out trees, and he gave us the Maya name. Grass. Sky. Water. Run. Walk. Sleep. Knife. Moccasins. Man. Woman. Face. Hands. Legs. Feet. Give. Take. I repeated each word he gave me until my pronunciation satisfied him. Chinta did the same.

After that first meal I lighted a cigaret, but this time I made a ritual of it, knowing how the burst of flame would awe and amaze both companions. I opened the book slowly, pulled out a match, cupped my hands (though there was no wind) as if deliberately to conceal how I worked my magic. Then I struck the light and held it up for both to see before I touched the flame to my cigaret.

The effect was all I could hope for. Chinta's eyes and Kom's eyes grew wide with wonder. I pinched the flame between my fingers and made a ceremony of offering the burnt stub to Kom. Exactly as Mahnak had done, he examined the relic intently, then wrapped it inside a leaf, and deposited it carefully in his leather pouch.

We made our next stop at night, and had to depend again on fruit for food. Kom reminded me that I had left his bow and his arrows beside the lake where I had found him pilfering my garments. Our only weapons were two flint knives, and not even the hardiest hunter attacks wild beasts with only a stone blade.

The forest grew much less dense as we advanced. Trees were smaller, underbrush grew more thickly where the sun could break through, and water was less plentiful. On the second morning I showed by companions my watch, and let them see the second hand racing through its narrow circle. That evening I revealed to them the miraculous powers of my fountain pen.

I took a receipted bill from my wallet and tore it into two pieces. I gave Kom a slip with my signature on it. On Chinta's half I scribbled "I love you," and signed that. Then I laughed at my own idiocy. I would have to demonstrate affection with some-

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

thing more than inked English words, and this was neither the time nor the place, with Kom at hand, to start my demonstration.

On the morning of the third day, Kom led us out of the thinning forest into a cleared plain. Corn grew in regular, unfenced fields. Here and there stood low buildings, which I took to be the homes of the farmers who worked these fields. And yonder, in the distance, rose the walls and towers of a city.

During the last twenty-four hours Kom's attitude toward me had been undergoing a profound change. His was no longer the comradeship of one proved warrior for another, nor even the gratitude of a man for one who saved his life. My conquest over him, the ease with which I had saved him from the *nacom's* knife, my rescue of Chinta, my matches, my watch and my pen—above all, my huge size and my white skin—combined to persuade the Maya that I was no man as he knew men. Even Chinta's birdlike speech, I am sure, helped shape the impression Kom was forming. I could not know then, of course, how he planned to use his discovery for his own purposes.

KOM WALKED ahead of us with the air of a servant who is proud to serve. He paid no heed when men and women looked up as we passed, when naked little boys and girls in long gowns ran after us. He marched on, and Chinta and I followed, until, after another hour, we came to the great, imposing city itself.

A city of stone it was. Its buildings loomed majestically against the blue sky, wide and high and strong. And there, perched above the others, were various stone structures like palaces or temples, rising from the flat tops of cone-shaped hills. No. Not hills. Pyramids, amazingly like the pyramids the pharaohs built with Israelite slaves on the banks of the ancient, storied Nile.

A host of men met us at the city's edge. Men in simple cloth breechclouts and moccasins. Men in caps adorned with feather work in bright hues and geometric patterns. Other men—a very few, standing proudly apart—in long, rich robes which seemed to be fashioned entirely of brilliant, interwoven feathers.

These few were the priests and high chiefs, I guessed. As we approached them, Kom spoke rapidly, but the few words I had learned of his tongue were not enough to tell me what he was saying. There were several sharp questions from the robed men, followed by Kom's quick answers. Each question, every answer, came in a tone of obvious awe.

Kom signed to Chinta and me to stay where we were. He went forward to join the robed men, and the respect with which those great ones received the simple warrior suggested to me what he had told them, what opinion he and they had formed of Chinta and me.

A few more words passed among the Mayas. Then Kom and the robed men fell on their knees. Behind them, the men in feathered capes did likewise. At the rear of the assemblage, men in breechclouts went to their knees. Hundreds of hands were lifted. Then those hundreds of bodies bent forward until hands and foreheads struck the dust of the roadway. Once, twice, thrice, seven times those bodies rose and fell.

From among the robed ones seven men stepped forward, and Kom with them. They formed a guard about Chinta and me and began a slow march into the city. Lesser men made quick room for them, and couriers ran

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

ahead to warn all people of our coming.

Along the narrow street we moved, where women and children crowded the doors that opened directly into the roadway, or peered through the narrow windows in the stone walls. We passed through a great marketplace which must have been four acres in extent, surrounded on all sides by at least a thousand massive stone columns.

THEN WE came to the largest of the pyramids. We climbed toward its crest, up the steps cut into its stone face. We reached the top, and I was startled to see the size of the imposing building that covered the center of that flat area—a building of stone, with an arched and colonnaded roof. I turned to glance back down the side of the pyramid, and saw that only Kom and the seven robed men had made the long climb. The other members of that procession had stayed below, and now, I saw, thousands of people had gathered there, staring up at us. At sight of my face, those thousands fell, touching their heads to the ground.

An aged man, obviously an important priest, led us inside the building, into a vast room whose ceiling was the vaulted stone roof. At the far end, on a raised stone dais, crouched the carved, life size figure of an animal. some sort of Jungle cat. Its stone hide was painted a brilliant red, and into the stone were set plates of apple green jade. Green jade made the beast's hungry eyes.

The priest led the way to the foot of that dais, then stepped aside and sank to his knees as I passed him with Chinta. I mounted the dais, and drew Chinta with me when I knew that she would have held back. Then I saw that a wide, deep seat had been cunningly fashioned to merge with the jungle cat's sinewy back. I sat there, and pulled Chinta down at my side.

I reached for a packet of matches. Slowly, trying to make the act impressive, I struck a light. Men gasped. Kom nodded sagely, as if I had but fulfilled a prophecy he had made. Kom and the robed ones fell to their knees, then, and knocked their heads against the stone floor of the temple. I gave the match stem to the priest, and the old man glowed with joy and pride.

In that instant I knew that I had guessed rightly the meaning of Kom's changing attitude toward me. I was a god. Quentin Coates, a Maya god. These people would twist my name to the syllables of their tongue, and in those musty books on dusty shelves, a thousand years hence, it would be recorded as Quetzalcoatl.

A DOZEN priests, of whom the aged one was first, served that temple to which I had been led. When all the robed men had withdrawn, and only Kom remained with the old man, Chinta and I were escorted to a spacious apartment and left alone. Clearly, these people had accepted me as a god. Obviously, Chinta, so unlike any woman they had known, had been conceded some sort of godhead, too, and acknowledged as the bride of their new deity. Chinta understood the meaning of all this as well as I; in the eyes of the Mayas, she and I were as truly married as if the rite of matrimony had been performed in their presence. And we were both content to have it that way.

I say that Chinta understood, but I do not mean that she understood that I was mere man. I think that she, too, believed in my godhead. Certainly, for all the love she gave, she gave, too, an embarrassing share

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

of devotion and service that was more than wifely.

Silent servants—slaves, I learned—brought us food and drink, then backed out, bowing low. Then, when we had eaten, the aged priest returned. With him was Kom—but not the warrior Kom whom I had attacked to recover my precious cigarets and matches. The Kom who came before me now was clad in a feathered robe as rich as that of the priest. Indeed, he *was* a priest, now. His discovery of us, his presentation of a god and his bride to the people of Chichen Itza, had been rewarded with immediate elevation to priesthood, and a place of power among the Mayas of that ancient city.

Kom was more than priest. He was high priest of Quetzalcoatl, and the old man who had ruled this temple for half a lifetime was now second to the obscure young warrior. The two of them made their changed roles clear to me, quickly. I thought that Kom gloated a little, and I wondered how much fact and how much fiction there had been in the explanation he gave of his meeting with me. The old priest resented his demotion, I knew, and his hatred of Kom was plain to see in his dark, fierce eyes.

I did not like the prospect. First among the Aztec warriors of a small war party, now among the chief's and priests of a great city, my principal achievement seemed to be the stirring of strife, the production of trouble. Chinta sensed the situation, too. I saw the worried look she gave me and felt the pressure of her fingers.

The former high priest withdrew, and Kom set out to make me understand that I must address the people of Chichen Itza before the sun should set that day. He made me understand that I must address them in words they knew, and not in the secret godly tongue I spoke. He showed me the short speech he had written for me, and sat at my feet to read it to me.

Then he made me repeat each word and each phrase after him, until I had memorized the whole strange message, until I could repeat it alone satisfactorily, with the gestures Kom indicated, placing stresses where he placed them and letting my voice rise or fall as his did. Chinta sat with me through that long ordeal, and smiled a little with her eyes whenever I stumbled over some awkward Maya word.

The sun was yet an hour high when Kom and the aged man who was now his assistant led Chinta and me out through a back door of the temple, to the flat top of the pyramid. Behind us came the eleven additional priests who served the shrine, and below, on the ground, I could see people moving toward some common goal.

AT THE EDGE of the pyramid, we started downward, and then I saw a narrow causeway that led from the temple toward that unseen goal ahead. We started across the causeway, and I realized that it ran always a short distance above the surrounding ground, as if the holy ones who trod it were not to set their feet on common earth. Along this route we went perhaps a thousand yards, and came out on a stone platform where a great stone bench had been set for me—and for Chinta.

Beyond the platform yawned a huge hole in the earth, a hole roughly oval in shape and perhaps some fifty yards or more across. On the other side of that chasm, in a giant semicircle, stood the thousands of people of Chichen Itza who had come to attend the rite of my first public appearance as a god. Along the edge of the plat-

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

form, on our side, the priests ranged themselves, with Kom in the central position of rank.

Kom lifted his hands for attention. He made the gesture as dramatically, as impressively, as if he had been a priest all his life. His voice rose in a slow chant. The other priests took it up, and at intervals a mighty chorus came from the assembled people as responses in a Scripture reading come from the members of a Christian congregation.

Then Kom turned toward me. He fell to his knees and repeated the head-knocking process, of which I had already began to grow a little weary. The others priests turned and went through that same ritual. Kom beckoned me forward, without letting his fellows know that I had to be prompted. In my khaki Army shirt (newly washed and mended by temple slaves) and my corduroy trousers, with collar open and head bare, I stood at the platform's edge to address my people.

A moment I waited, looking over that sea of upturned faces, before I began the speech Kom had taught me. If I had known the meanings of half the words I used, I swear, that speech had never been uttered. There would have been no Quetzalcoatl in the Maya-Aztec pantheon, and Hernando Cortez might not have found the conquest of Mexico made easy by an ancient legend.

"My people! I come in your hour of greatest need. You have known my worship through many years. You have called me Kukulkan, and the feathered serpent has been my symbol.

"I come now that you may see me as I am, a giant fair of skin, in garb unlike the garments of men, more powerful than any man or any god has been since the birth of time. My new name—my true name—you shall learn from the priests who shall serve me, and by that name, I charge you, shall you know me henceforth.

"I come because a strange and hostile nation would seize the fair lands we gods have bestowed upon you. They would wreak my temples, and all the temples of all the gods you know, or use our temples to serve their own false gods. Already the enemy moves upon Chichen Itza through the forests, ready to kill and pillage.

"But I am a powerful god, and from my home in the heavens I saw your enemy prepare for war. I heard them in council and came among you to warn you. I entered the enemy's camp and snatched the warrior Ah Kom Tzohom from under the very knife of one of their priests as Ah Kom Tzohom lay already stretched on the sacrificial altar. I made him my servant, and brought him with me to Chichen Itza, that he might, in my service, repay his and your debt to me and spread my great glory through the land."

I PAUSED a moment, as Kom had taught me to pause during that brief but intensive rehearsal. For an instant the people remained silent; then they raised a great cry. I let them shout themselves hoarse, never guessing that Kom had planned that demonstration as much for himself as for me. When the people were quiet again, I went on with my speech. And how I wish now that I had not!

"Through long *baktuns* it has been your faithful custom to bring your offerings to this Well of Sacrifice, that I might witness your devotion and reward your piety. In time of trouble you have given the greatest of your treasures, even your bravest warriors and your loveliest virgins, to win my favor.

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

"Now you face the gravest trouble the Mayas of Chichen Itza, of all this vast land, have ever known. A powerful enemy would seize your lands, enslave your people, and destroy your chiefs. I come to save you, and in your obedience I shall read your right to my help. Let me see, then, what you shall offer today in my service."

Again, for a time, the people were hushed. Again, a shout went up from thousands of throats. Then Kom stepped forward and signaled for silence. The people obeyed. And from behind me came four of my priests. Between them they dragged a lovely young girl.

The girl's face was twisted with fear. I knew then, what fate was to be hers. I knew, too, that I had prepared the way for her death—had even demanded it—with my parroted recital of words I did not comprehend. And I knew that there was nothing I could do in that moment to halt the proceedings, without losing both my own life and Chinta's.

The priests dragged the girl to the edge of the platform. They lifted her off her feet and swung her backward in a slow arc, then hurled her from them. Her body flew outward and upward before it fell and plunged from sight. Her single scream of terror echoed weirdly from the stone walls of the sacrificial well. Then came the splash of water as the victim of my godhead paid her life. And among the people a vast sigh ran.

NEITHER Chinta nor I ate any of the food the temple slaves brought us that evening, and we were both glad that Kom and the other priests stayed away from us. When morning arrived, I felt little better, but during the long hours I had determined to find some way to avenge the unknown girl's death, and my new resolve did at least make it easier to face the new day.

Kom appeared soon after breakfast. I could not help being cold toward him, but he seemed to accept that as merely the natural reserve a god might show toward ordinary mortals. He indicated that Chinta and I were to take up in earnest our study of the Maya tongue, which he had begun with us during our flight from the Aztecs, and we spent some two hours learning words and simple sentences.

Kom made me understand that a thousand warriors had gone out with the dawn to meet the invading Aztecs. Another thousand would be on their way before noon. Couriers were speeding to the other towns and cities of Yucatan, to gather greater forces. The Aztecs would find themselves trapped and destroyed—and with them, I thought bitterly, was that Mahnak who had saved my life and claimed me as blood brother. Yes, and if by any chance the battle should go against the Mayas, I would be expected to appear in person, bringing my people divine aid.

In the afternoon our lessons in the Maya speech were renewed, and before the day ended both Chinta and I had begun to form brief sentences of our own. I had always had some facility with languages, and although the Maya bore no resemblance to any tongue I knew, the ability to learn languages stood me in good stead, so that I made rapid progress. Chinta did as well.

What pleased us most was the fact that we had found, in the Maya, a bridge between my English and her song-speech. We lay, far into the night, trying to tell each other about ourselves, and I learned that she was the last of a people who had lived in distant mountains far to the west. Her little tribe called themselves Atalantes, and their tradition told of a

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

long past time when they had ruled all the land.

I recalled the ancient legend of a lost Atlantis, and wondered whether or not her people's past might be linked with that old tale, but she could not tell me. Enemies, she said, had found her tribe's mountain retreat. Every man had been killed, and every young woman carried off. She had escaped from the warrior who seized her and had wandered for weeks alone through mountains and valleys and forests, traveling always eastward, because her people's legends said that the great sea lay that way and because her people had entered this land from the eastern sea. Perhaps, by some means, she might reach the sea and find her way back to the ancient birthplace of her forebears.

Even there in the darkness I could picture her loveliness—her fair skin and her delicate form, so unlike any of the early inhabitants of the Americas, and convinced myself that her people had indeed invaded this land from the sea at some distant time. But whether or not the name they gave themselves—Atalantes—meant what I wished it to mean, I was never to learn. Whence the Atalantes came, and why they alone of all nations spoke in that haunting, bird song language, remains a mystery.

A god, I learned, was not expected to show himself among the people, except when his priests deemed it wise. For two more days Chinta and I lived inside that stately temple atop an ancient pyramid, and were not permitted to step out into the sunlight. Kom insisted that we continue our lessons, and said that we should soon begin to learn the Maya writing. (If that promise had been carried out, the Maya heiroglyphics would not today be a mystery to archeologists, and I should have something more than my word to support this story.)

We had been four nights and three full days a god and a goddess when Kom appeared before us ere we had finished our breakfast. The young priest's face was grave and his voice betrayed fear.

"Our people have need of their god," he began. "The Aztecs have driven our warriors back almost to the edge of the forest. The Aztecs are many, and if our god of war help us not, Chichen Itza must fall. Then," —I could not fail to recognize the insolent significance in his tone— "there will be no need of a god of war in Chichen Itza."

I pondered his words for long, slow minutes before I made reply, and Kom's impatience was beginning to show through the mask of reverence he wore. I grinned at him then. Already a plan had taken skeleton shape in my mind. Chinta and I would go with him, to the scene of battle. We would take the first chance to escape and make our way alone, as Chinta had once made her way, through the forest, or rejoin the Aztecs and risk their wrath, hoping that Mahnak's vow of blood brotherhood could still protect us.

But priests have always decided for themselves what their gods should be and do, and this priest—new as he was at the game—knew his own mind. Chinta would remain in the temple until I should return with the victorious Maya warriors.

I left Chinta there, a hostage to fortune, a pledge of my own loyalty. I kissed her, and went in pomp, surrounded by priests, to join the retreating Maya forces a few miles outside the great stone city of Chichen Itza.

I DID NOT go to the battlefront like some twentieth century dig-

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

nitary, carefully protected from harm and screened from any risk of contact with things unpleasant. I went as a god, with priests and servants to wait upon me, but without any thought of protection, because no harm can befall a true god. I went to give protection, not to receive it.

I went in a conveyance very like a sedan chair, suspended between two long poles carried on the shoulders of brawny slaves. The curtains of my chair were drawn; now that I was indeed a god, it was not meet that common mortals look upon my face, except when my priests should choose that my face be shown to serve some purpose. Kom walked at my side, to be my ear and my voice.

I did manage to tear a small slit in the fabric of which the tightly fitting curtain was made, and thus got a limited view of the route we traveled. We left Chichen Itza by the road over which we had entered the city four days earlier. We passed the same low huts, the same fields of corn and other crops. We came to the end of the clearing and entered the forest.

Kom explained the battle plan to me during the one brief stop we made. He used a stick to indicate positions on the soft earth. The Maya defenders, he said, were spread in a wide arc covering the approach to the city from north, west, and south. The Aztecs had split their forces into many parties like that which Mahnak commanded, and individual parties kept jabbing and probing the Maya lines at a dozen points simultaneously.

Whenever one Aztec band gained a momentary advantage, several other bands raced in from some central reserve to exploit the gain, and if the invaders broke through at that point, the whole Maya line had to be drawn back and reformed. By that simple device, repeated over and over these last three days, the Aztecs had forced the defenders back mile by mile, until now the fighting raged less than ten miles from the great city of Chichen Itza.

I took the stick from Kom's hand and drew a diagram of my own. The Aztecs, it appeared, had proved themselves far better strategists than the Maya chiefs; the Mayas did not seem even to have learned anything from the invaders' successful tactics.

"Let one man in every three be withdrawn from the fighting," I suggested. Nay, I ordered it. I was a god, a god of war. "Let every such man gather here under a chief. Let every chief and sub-chief, where the fighting is, choose a courier who shall bring us news of the battle. Wherever need for help may arise, I shall go, with the party assembled here, to turn back the Aztec invaders."

Kom hailed my plan as proof of the genius of godhead. He did not appear even to recognize the scheme as a mere adaptation of that which the Aztecs had been using so well. He relayed my orders to chiefs all along the defense arc through priests and slaves, and within minutes after his messengers departed, armed warriors began to gather in the glade where we had made our headquarters.

The first demand for our aid came almost before the chief assigned to our reserve force—a sturdy, middle aged man called Xochil—had grouped his warriors into a fighting organization. The call from a point on the southwestern rim of the Maya arc, and Xochil would have rushed with his strength, but I forbade it.

"Leave half your men here," I commanded. "They might be needed at one point while we are busy at another."

Kom would have had me borne to

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

the scene of the fighting in my sedan chair, but I overruled him. I ordered the slaves to stay behind with the chair and strode with Xochil through the forest. Kom stayed close to me, and with him came the lesser priests he had brought from Chichen Itza.

SUDDENLY an arrow slashed through the low branches of a tree and fell to earth, inches from my foot. I plucked if from the ground and found it almost exactly like those with which I had been put to trail against an Aztec warrior less than one week earlier. Then, handling that arrow, I realized that I carried no weapon as I headed into battle. Even the Aztec knife I had left behind me at the temple. Yet I did not dare ask for weapons; a god should need no help from mortal playthings to achieve his miracles.

Three Maya warriors came racing through the trees toward us. One carried his bow. The other two ran with empty hands. It did not need godly clairvoyance to see they were running for their lives. As they approached us, an arrow took one of the three in the back, and he stumbled and fell.

The two remaining warriors saw us and hesitated. One of them stared at me, then fell to his knees and knocked his head on the ground. The other stared, too, then took to his heels again. Xochil sent a swiftly flung spear after him, and the fleeing man dropped. Cowards, I saw, would get short shrift from the sturdy Maya chieftain.

Xochil questioned the one warrior sharply, then formed his party into two groups. The first group consisted of men armed each with two spears and a knife. The second group had only their bows and arrows, plus all the arrows the spearbearers had had.

Xochil's plan was obvious to me then. The spearmen would form a shock force, driving ahead to hurl weapons and try to get to close quarters with their knives. The bowmen would cover their comrades' advance with showers of arrows—and cover their retreat in the same manner, if that should be necessary.

The scheme worked. Xochil went with the first group, and I went with him. I had no choice in the matter. I was as much a prisoner of Kom and his priests as once I had been a captive of the Aztecs, and behind me, in the temple at Chichen Itza, I had left my lovely Chinta to guarantee my good behavior.

The spearmen ran forward lightly, Xochil at their head and I at Xochil's side. We spread in a long line, each man ten feet or so from his neighbor, following the aisles between the trees. Behind us came the bowmen.

Ahead then, I saw battle. Fierce, hand to hand battle. Men slashing at each other with cruel flint knives. Men clutching each other's throats, locked together in struggles from each of which only one could emerge alive. And wherever a Maya warrior fought, it seemed, two Aztecs fought. The Aztec reserve force was in action again, smashing another hole in the Maya line.

Xochil's men dropped their spears at a word from him, and the order ran swiftly along our extended front. Then Xochil's Mayas drew their knives and flung themselves up on the Aztecs.

I THREW myself into the fight. There was nothing else I could have done for Chinta's safety and my own. I leaped at the back of an Aztec and bore him to earth. I twisted his knife from his hand and bent his arm until it snapped as Quatl's had

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

snapped.

Another Aztec came at me. I smashed a fist into his face, and before he recovered from the blow, I grabbed at his knife hand. More warriors converged on me, and I used the fellow's body as a shield. He got two flint blades intended for me, and I felt his life blood running down over the arm and hand that held him against me.

Some Aztec set up a wild cry.

"The giant! It's the white giant!"

That ended the Aztec breakthrough at that point in the Maya line. The Aztecs fled. The Maya defenders reformed their forces, and Xochil withdrew his reserves for use wherever else they might be needed. And every Maya there acquired new faith in his new white god.

My knuckles were sore where they had struck against the bones of an Aztec face, and I realized with a sort of shock that I had hit that warrior with my *left* fist. The ointment daubed on my wounds by Mahnak had done a remarkable job, apparently, of healing. And I had used the new strength to help destroy men of Mahnak's nation. The only justification I could find for myself was the duty I owed to my beautiful Chinta.

Then I got to thinking of the fact that I had been recognized by those Aztecs. Was the man who set up a shout of "White giant!" a member of Mahnak's own band? Or had the news of my capture and escape, of my physical prowess and miraculous powers, already been spread among all the bands of the Aztec invaders? I could not know, of course. I still don't know, and never shall.

Xochil and I answered another call for help from the northern tip of the Maya defense arc, with the same result, except that the job there was more quickly and more easily accomplished. I had acquired a knife from my first Aztec victim that day, and in this second fight I used it to carve the fate of another man.

The third call came from the very center of the battle line. The scene almost duplicated the first fight. As we advanced, we encountered Maya warriors running away. Xochil slew two of the skulkers himself, and some of his followers killed two more. The others slunk into our party and started back with us toward the battle from which they had fled.

Again we came upon a hand to hand battle. Again the Aztecs had numerical superiorty, before we arrived, by their use of reserves. Again, each Maya faced an almost hopeless struggle against two or more invading foemen. Even with Xochil's men at hand, the odds were no better than even, and the Maya battle spirit had been weakened by three days of continuous retreat.

Xochil attacked an Aztec chieftain, and I saw the two of them slashing at each other. Then I was fighting for my own life, and when at last I had dispatched my personal enemy, Xochil was doing battle singlehanded against two men. I raced to the older man's aid, but too late. Even as I reached his side, I saw a blade enter his throat. I saw the red spurt of blood. I saw Xochil fall. I got one of his killers, the other was already stumbling away with a mortal wound that Xochil had inflicted before he died.

I saw an Aztec moving toward me—saw him out of the corner of my eye—and leaped at him. I got my long fingers about his throat and squeezed. I slammed him to the ground, face downward, and threw myself on him. Around me a hundred individual fights raged, and some of them a Maya won, some an Aztec, but I was only vaguely aware of what happened

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

anywhere except where I fought.

Again some Aztec warriors called attention to me with a shout.

"The giant! Mahnak's white giant!"

And almost every Aztec still on his feet turned and fled.

"The god!" Maya warriors began to cry. "Quetzalcoatl, the great white god!"

I released my hold on my foeman's throat. As I got to my feet, the toe of my shoe caught under his ribs and rolled him onto his back. I saw his face. The man was Mahnak.

I saw Mahnak's chest begin to rise and fall with new, labored breathing, now that my grip had left his throat. So he was not dead. I felt a sense of relief that I had not killed him. Then I was not sure that he would not have been better dead. At Chichen Itza the Well of Sacrifice waited for such as he.

The Aztec chief opened his eyes and turned them on me. I tried to sustain his gaze, tried to make him understand how bitterly I regretted my victory over him. I could not read his gaze. He closed his eyes, and I turned away as two Mayas came to bind my blood brother and make him a captive of war.

THAT FIGHT broke the Aztec invasion of Yucatan, for a time. Not for years would the Mexican warriors make another assault upon the Maya civilization. Chichen Itza—all the broad empire of the Mayan peoples—had won a reprieve, and the story of the great white god who had saved their land would spread far and wide.

I demanded and got the right to speak with the Aztec chieftain I had conquered and captured. When I advanced to speak with Mahnak, then, Kom would have joined me, and I had to order him away. He went, but not with good grace, and I knew that he had recognized the prisoner as chief of the band which had once held Kom himself a fit victim for sacrifice.

Mahnak's face betrayed no emotion. His black eyes studied me, but in their depths I could read nothing. He stood apart from the other prisoners the Mayas had taken that day, with his hands bound behind him but his head proudly erect as became an Aztec *cocom*. I spoke in the Maya tongue, which he seemed to understand.

"These people have made me a god. But also I am a prisoner of their priests. They hold my woman captive, as your people held her, and I must keep faith with them for her sake."

Mahnak merely stared at me, and I wondered what thoughts were coursing through his mind. I felt small and insignificant, trying to justify myself to this proud chief who was at once my blood brother and my prisoner. I waited for some response, but Mahnak offered none. He merely stared. I bared my forearm and let him see where his blood had flowed with mine.

"I have not forgotten," I said then. "I shall do what I can."

And still Mahnak merely stared.

The sudden subtropical night fell, and the Mayas made camp. Guards were set over the hundreds of prisoners taken, and couriers were sent off through the darkness to spread the news of victory. Kom and his priests forced me apart from the warriors and set up a line of sentries to guarantee our seclusion. Their slaves brought me food, but I could not eat, and when Kom sought speech with me, I refused to let him come near me.

Next morning we started back to Chichen Itza, and as soon as we broke from the forest to come upon the fields of corn, our march became a triumphal parade. I rode at the head in my sedan chair, borne on brawny

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

shoulders, and all I could see was the little that was visible through a slit in the curtains that hid me from the gaze of common mortals. I knew when we entered the city because my bearers' feet made a different sound on the stone road, and because loud shouts ripped from more Maya throats.

I was not freed from my chaired jail until we had reached the summit of our pyramid, and there the priests who had stayed behind had gathered to greet me with their ususal head knocking. I hurried past them and into the temple, into the private apartment I shared with Chinta. She kissed me and clung to me a little, and listened quietly while I told her of the battle, and of Mahnak.

The day passed too quickly. The hours ran on winged feet, and then the sun slipped toward the horizon. Kom came, as I had known he would come, to bid me attend with Chinta upon the sacrifice of prisoners in celebration of the Maya victory.

ONCE MORE we trod the stone causeway that led from the templed pyramid to the great Well of Sacrifice. Once more I saw, beyond the Well, the dark faces of thousands gathered to watch the cruel rites that passed with them for religion. Once more the priests ranged themselves at the edge of that wide stone platform, and once more Kom led the chant that opened their brutal service.

Once more the great god Quetzalcoatl stepped forth to address his people, but this time the words I spoke were my own—slow and clumsy, perhaps, and sometimes mispronounced, but at least my own.

"My people," I began. "I have given you the victory. I have driven the Aztec from your land, and I have brought you many captives. I have kept my promise to you.

"Now the purpose for which I came among you is served. Before another sun sets, I shall return with my bride to the home of the gods, beyond the great sea that shines in the east."

I paused, not for effect, but trying to think of something more to say. That bit about going away had been conceived even as I uttered it. I hoped that Kom and the other priests would snatch at the thought and see the advantage my going would give them; they could build any legend about me then that pleased their fancy, and still retain their power.

I wanted to issue some edict against their rite of human scarifice, but knew that I dared not. The custom was too old and too firmly established, and such an edict now would contradict my own demand of a few nights before for the death of a virgin. Yet I had to say something that might save Mahnak. I caught a glimpse of Kom's face and knew that he was raging.

"Today," I went on, "you will offer up in honor the lives of brave foemen. From among them I shall choose one to go with me on my journey hence as my slave.

"Farewell!"

I took my seat. A slow ripple of indistinguishable words ran through the assembled thousands and rose to a shouted paean of praise for the powerful god who had saved them from Aztec invaders. Kom was glowering at me, and I realized then, for the first time, that his belief in my godhead had never been more than a clever pretense designed for his own advancement. He had made use of me, and thus far, had won every trick.

Only a few of the bravest and most important of the Aztecs were to be sacrificed. The other prisoners would be pressed into slavery, if they wished it and were accepted, adopted

(Continued On Page 148)

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Hi, Stranger!

Goin' West? Here's How to Be a Top Hand Instead of a Tenderfoot—the BEST in the West!

Get more fun out of that dude ranch vacation with the help of this easy-reading handbook. A lifetime of range experience has been condensed here by Arthur Carhart—author-lecturer as well as veteran rancher. Tips on proper clothes, the climate, riding, mountain travel and trail riding to make your western trip double fun and save you money, too. Know your horses—know your way around—learn the ropes *before* you get there. Fascinating reading—plenty of savvy—in Hi, Stranger!

NOW—ONLY

$3.00

Send for your copy TODAY!

ZIFF-DAVIS PUBLISHING COMPANY, Dept. MW,
185 N. Wabash Avenue, Chicago 1, Ill.

Please send me .... copies of Hi, Stranger! at $3.00 each.

☐ Cash. (You pay postage). ☐ Bill me.

Name.....

Address.....

City.....Zone.....State.....

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

(Continued From Page 146)

into the Maya nation.

I sat helplessly by while three staunch warriors were marched forth and thrown into that yawning well. They went without flinching. Then I saw Mahnak coming. He walked alone, without bonds and without guards because he had demanded that right as a chief. I leaped to my feet and strode to the edge of the platform. I lifted my hands for attention.

"This," I said to the people, "is he whom I choose for my journey beyond the shining sea."

"Aye! Aye!" a thousand voices shouted. "Let this one be the god's slave on his journey!"

Kom was standing beside me then.

"The great god Quetzalcoatl shall have his slave," he shrieked at the top of his voice. "The Aztec's soul shall serve the god well beyond the shining sea of death!"

He gave a signal to his priests, and four of them jumped forward to seize my blood brother Mahnak. Before I could intervene, the Aztec *cocom* raised his right hand in salute to me. He pointed to the slender scar on his arm where his and my blood had flowed in a single stream. Then he leaped from the platform into the Well of Sacrifice.

I RETURNED to my seat beside Chinta. Her small hand crept out to grip my fingers, and I knew that she understood all without being told. Another Aztec was sacrificed, and he went to his doom as bravely as any of his comrades. The sixth warrior was Quatl.

Quatl's right forearm was still tightly bandaged, but he did not wear it in a sling. He strode onto the platform more boldly, even, than the others had done. He came opposite the bench where Chinta and I sat, then turned to face us. Some of the priests would have urged him on, but he shook them off. On his face was a twisted grimace of hatred for me.

The seconds through which Quatl stood there glaring at me dragged like hours. Slowly, a fiendish light spread across his dark and evil face. Before anyone could intervene, before I had guessed his purpose, he leaped to the bench. He snatched the dainty Chinta in his good arm and ran toward the brink of the Well.

I was half a step behind him. I had an arm half hooked about his body. Then I felt a hard shove against my back and almost toppled over the edge of the platform. I caught myself, but lost Quatl. The Aztec sprang into the abyss, and took Chinta with him.

Before I could quite regain my balance, I felt another vigorous shove from behind. The people of Chichen Itza, watching in their thousands from beyond the Well, could see little except that which took place at the very edge of the platform.

I tried once more to save myself, and knew that I could not. I swung my right arm back and circled a feather-clad body, and knew that the body was Kom's. I felt myself falling and dragged Kom with me. His body broke from my clumsy grip and fell alone.

Below me I saw the dark, forbidding water, seventy feet beneath the platform from which I had fallen. Down there waited, in death, my blood brother Mahnak, and my beautiful Chinta, her lovely bird speech stilled forever.

Then I knew that my body was going to strike against a stone. A jutting, outthrust ledge of limestone loomed directly beneath me.

Above me, where the last rays of

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

the sun still lighted the world, the people of Chichen Itza saw only enough to make a legend. The great white god had taken his promised journey beyond the shining sea. With him had gone his glorious bride and his chosen slave and his own high priest, to serve his eternal needs.

And so the story grew and spread through the land. The people remembered how once the white god had come among them in their hour of need and told themselves that so he would come again when the time was ripe. And when, after one and a half *baktuns*, Hernando Cortez came with his white skin and his black hair, in the garb of a god of war from beyond the shining sea, the people thought he was I, and welcomed him into the land.

At the hospital they told me I had been unconscious more than eight full days. During those days I had said strange things in English and German and Spanish, and other still stranger things in some outlandish gibberish no one there could understand.

And on the second day the surgeons had found on my body two ugly injuries, like vicious knife wounds, which no one had seen when I was first examined, after the blast. They wondered whence had come the fragment of flint they drug from my shoulder blade.

Another problem puzzled them. When the nurse brought me my shirt, she saw two neatly mended holes that fitted perfectly over my wounds. I told the doctors and nurses nothing, but you—well, you have read some of those musty books from the dusty shelves, and you understand.

THE END

ART FOR PLEASURE AND PROFIT

BE AN ARTIST! LEARN TO DRAW AT HOME IN YOUR SPARE TIME

TRAINED ARTISTS ARE CAPABLE OF EARNING $65, $80 And More a Week

TWO BIG ART OUTFITS GIVEN

As soon as you enroll, we send you the first of the TWO complete Artists' Outfits, including all the material you need to start the course. Later in the course you receive the second, advanced outfit. All at no extra cost.

Read What These Graduates Say:
FREE LANCE ARTIST—*R. H. Woodruff of Cleveland, Ohio, was more than paid for his WSA training by doing sign and poster work. (4-46)*
STAFF ARTIST AND CARTOONIST—*G. W. Thomas, Los Angeles newspaper artist, says: "WSA is Number One school in U. S. A." (1-46)*

WRITE FOR FREE BOOK "ART FOR PLEASURE OR PROFIT"

Tells about our method of instruction and commercial opportunities for you . . . also about WSA students, what they say, and reproductions of their artwork.

APPROVED FOR VETERANS EST. 1914

WASHINGTON SCHOOL OF ART

Prepare yourself for a pleasant, profitable Art career. COMMERCIAL ART, DESIGNING, CARTOONING—all in one complete modern home study course. Many pleasant art positions available in this great field. You can become your own boss. Work at home on your own time. Many students earn extra money while learning by designing posters, rendering signs, lettering etc. W. S. A. is now in its 35th successful year of training men and women. No previous art experience necessary, we teach you step-by-step for professional art jobs in advertising, television newspaper and magazine publishing, department stores, printers, engravers, art studios, etc. Get the facts now. *Low cost—only $5 monthly!*

FREE BOOK gives details

WASHINGTON SCHOOL OF ART, Studio 9211R
1115—15th St., N. W., Washington 5, D. C.

Please send me full information and your Free Book, "Art for Pleasure and Profit."

Name..... Age.....

Street .....

City..... Zone..... State.....

☐ I am entitled to training under the GI Bill.

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

READER'S PAGE

WE'VE DONE IT AGAIN!
Sirs:

Well, you've done it again! *How* you do it I just can't figure out. FA just keeps at the top of my favorite reading list—even over Amazing! Do you save all the good stories for FA? Anyway, here's how I liked the July issue:

Did Peter Worth write it, or was "The Robot Men of Bubble City" Rog Phillips' masterful work? I think it's the best that FA has had in years—well, eleven months to be exact. —"Man From Yesterday" to be specific. (Speaking of that great yarn, can't you do something about it? I mean, pretend the last six words were a typographical error or something—or figure out a way to get Avar reincarnated?)

Which brings to mind the fact that I like king-size stories. You know, the long novels. Got any hanging around?

My nomination for the best short story of the year is "Five Years in the Marmalade" by St. Reynard. I have said, in those words, all that *can* be said about that little gem. What a yarn!

Third place goes to "Twin Satellite." While I wouldn't call it strictly stf, it was, nevertheless, cute.

Ah, poor "Eye of the World." Where, oh where, indeed, is all the hope that we optimistically foresaw for the second half of the story? Gone with the wind!

Still, as a piece of satire, it wasn't bad. The end just seemed to hang in mid-air, with nothing explained. Oh, well...

The cover was excellent. Not too lurid, and not conservative. Keep them that way.

Oh, yes, am hoping to see the Reader's Page back next issue. Don't let me down.

W. Paul Ganley
119 Ward Rd.
North Tonawanda, N.Y.

Confidentially, Paul, we do try to keep the really top stories for your favorite magazine! Matter of fact, at press time, we aren't above pulling a top yarn from one book and sneaking it into another! As to your nomination for top short of the year, well, as far as reader reaction is concerned, it seems that "Blue Bottle Fly" and "Five Years in the Marmalade" will fight a close battle. —And both were written by the same author! That's something of a record, we think. And, we apologize for the typo in listing Worth as the author of Phillips' novel. Must have been the deros at work! We talked to Lee Francis, author of "The Man From Yesterday", and he says he'll try and think of a way to bring Avar back.....Ed.

REALITY? OF COURSE NOT!
Sirs:

By profession I'm a secretary—at least I think I am. . .but when my boss comes in and asks me why I haven't done any work I'll have to tell him I'm Gregory. Then *we'll* be fired—if we really had the job in the first place...

However, I'm sure I conjured up a wonderful magazine called FA, which I wish everyone could read, but they can't, unless—no, I'm just dreaming...

I finished imagining a story in the above magazine called "The Murder Ray." It was very good, but I have imagined I read better. In the past I have read many good stories in FA and AS—and I wish they could all be set down in a list because I don't know how many seconds I have left!

After I finish this letter I think I will sit back and relax and find out what happens next in my very short existence. Who knows?...

Just in case I am really me, and FA does exist, let me say that all this was prompted by reading "Blue Bottle Fly" by St. Reynard. That yarn really knocked me off my track and caused me to write this letter. Let's have more like it, by all means—but not too soon, the shock is too great, believe me!

Miss Sitty Earl
503 Oak St.
North Wales, Pa.

We take it you were very much impressed with St. Reynard's yarn. And we'd like to say right here that the response on that story has been terrific. Story? Heck now, you just know it's all true.....Ed.

SUPER-DELUXE AND TERRIFIC!
Sirs:

I have just finished reading your terrific July issue of FA. It was super-deluxe!

First place goes to Alex Blade for a rattling good yarn, "The Eye of the World." I was kinda let down by the "pat" ending, thinking that there should have been some way to destroy the *Scravvzek* for all time, but maybe the author was paving the way for a sequel. We'll call things square if that's the case.

Second place goes to Rog Phillip's great story, "The Robot Men of Bubble City."

"Five Years in the Marmalade" wasn't quite up to St. Reynard's unique "Blue Bottle Fly", but it was swell just the same.

Guy Archette's "Twin Satellite" rounded out a near-perfect issue. Nice going!

In case any readers of FA are interested, I have a number of things to swap, sell,

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

or what-have-you, ranging from stf books to stamps. I'd be glad to hear from any and all FA readers.

Robert E. Briney
561 W. Western Ave.
Muskegon, Mich.

Many thanks, Bob for the nice things you had to say about FA. And as to St. Reynard, keep your eyes peeled for a great new story coming up soon.....Ed.

A FUTURE CLASSIC

Sirs:

Congratulations on your tale, "Blue Bottle Fly" by Geoff St. Reynard. I believe it will some day be considered a classic.

After having spent twenty years reading millions of words of science-fantasy fiction, I have sadly come to the conclusion that new ideas are all too rare. St. Reynard's story is a happy exception. But it is not in disparagement of other stories that I praise this one so highly. A story can be as great through the cleverness of its plot or the sweep of its descriptions or the beauty of its wording—as through the originality of its ideas. But the readers of stf are always looking for yarns with a new theme or slant. It is not often that one has such a tidbit as "Blue Bottle Fly."

I should imagine an editor derives his most satisfying reward from such a discovery. I myself feel as though I had just uncovered a diamond...

Harold B. Wenzel
1402 N. Boston Pl.
Tulsa, Okla.

Nothing much we can add to that, Harold. Except to agree with you.....Ed.

NO MORE SERIALS

Sirs:

You so-and-sos!

I got caught once. I may get caught again—but you'll have no chance to do it the third time. ...I'm speaking about the June and July issues of FA. You've always stated that your stories were complete in one issue—and then you go and print a serial!

I've given up practically all magazines because of this, and next time yours will go off my list. I'm one of those people who want to read a story—from beginning to end—in one issue.

Don't do it again—please!

W. S. Marsters
5 Highland St.
Waltham, 54, Mass.

The story you speak of, "The Eye of the World", was just too long to fit in one issue. That was the only reason we ran it as a two part serial. But rest assured that serials have never been a policy of FA. You'll be getting your yarns complete—as usual.....Ed.

HE'S WITH US FOR GOOD

Sirs:

This is my first letter to you, and, as a matter of fact, I'm a new reader of FA.

Everything you *want* to know and *should* know about Sex is brought to you in this NEW book. Banish Prudery and False Modesty! Learn the *truth* about this vital subject. Do not mistake Innocence for Ignorance . . . for Ignorance is the greatest sin of all—the sin that leaves broken lives, wrecked homes, divorce and scandal in its wake! Stop taking needless chances! This courageous, modern volume boldly and fearlessly reveals the most intimate facts. Nothing is left out. Its daring revelations will astonish you . . . and point the way to *enduring love and happiness.*

HIDDEN SECRETS REVEALED!

For years the hidden Secrets of Sex have been withheld. Now in this priceless book you can find practical, definite and detailed information. It tells all about

- Preparations for Marriage
- The Delights of Marriage
- What to Allow a Lover to Do
- Honeymoon Secrets
- Birth Control
- Explanatory Diagrams
- Adjustment to Marriage
- Analysis of Sex
- How to Make Love
- The Marriage Bed!

Special Announcement

"The Sex Technique in Marriage" by Dr. I. Hutton is entirely new and different. The latest, newest discoveries about sex are contained in the outspoken pages of this modern, up-to-the-minute volume.

Just as there have been new facts uncovered about science, health and food, so too, have new discoveries been made about sex and relations between men and women. *These startling new facts are now openly revealed!* Many old-fashioned ideas have been discarded; many accepted habits and customs have been found to be wrong; many things formerly censured are now considered in an entirely new light.

Special Note: *"Sex Technique"* is not an old-fashioned medical or health book. It has not been padded with tiresome pages of everyday things that you already know. "Sex Technique in Marriage" is a modern, new SEX book—every page crammed with gripping, absorbing knowledge that will fascinate you.

THIS BOOK WILL NOT BE SOLD TO MINORS

$1.98

Healthcraft, Inc., Dept. 2-F
247 W. 19th St., New York 11, N. Y.

Send me "The Sex Technique in Marriage," by Dr. I. E. Hutton, in plain wrapper marked "Personal." I will pay $1.98 and a few cents postage on delivery. I must be DELIGHTED or I will return the book within 5 days and you will refund purchase price. [I am over 21 years old.]

Name .....

Address .....

☐ CHECK HERE if you wish to inclose only $1.98 with coupon, thus saving delivery charges. Same Money-Back Guarantee, of course.

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

OWN Your Own Business

Lifetime Income

Clean and Mothproof rugs and upholstery "in the home" or public buildings. Start full or part time. Gross profits up to $15 and $20 a day on EACH of your service men. Easy to learn . . . quickly established.

DURACLEAN cleans by absorption! No scrubbing, soaking or shrinkage. Dirt and grease vanish . . . matted pile rises . . . colors revive. Furnishings used again same day.

DURAPROOF resists moths and carpet beetles. Your service backed by a National Money Back 4 Year Warranty.

We furnish enough materials to return your total investment. EASY TERMS. Territories limited. Send for **FREE** booklet . . . full details.

PATENTED PORTABLE EQUIPMENT

Duraclean Co. 9-37N Duraclean Bldg., Deerfield, Illinois

1000 LAFFS

20 all different new pocket size illustrated cartoon booklets for Men. Packed with red hot belly-laughs. They're a riot! It's amazing how much fun you can get for a BUCK. Sent prepaid and sealed NOW for only $1. No C.O.D.

GRAYKO, Dept. 1740 Box 520, G.P.O., N.Y.C. 1

OWN A PIECE OF
THE GOOD EARTH
AT A PRICE YOU CAN AFFORD!

California and Oregon ranch, timber, hunting and fishing lands at $1.25 to $5 acre full price. Write today (enclose 10c coin) for circulars, photos, outline maps:

Pacific Lands P.O. Box 2350-JL Hollywood 28, Calif.

DO THE ANCIENT GODS

drive the planets in their courses, as was once believed? Or has the amazing mind of a modern American at last shattered this mystery of the ages? Read "COSMIC MOTION," a presentation of new and astounding evidence that the Earth, the Moon, the Planets and the Stars are moved in their courses by magnetic and electric forces which obtain their energy from Atomic Power. Don't miss the opportunity to receive an autographed copy of this startling revelation by a man who may be a modern Isaac Newton. Written in plain English, easily understood. Rush $1 for your copy TODAY.

NEW PRINCIPIA PUBLICATIONS
P. O. Box 835 Fort Wayne, Indiana

* * * **GET READY TO LIVE!** * * *

Will you gamble 1c to win happiness, bigger income, love? Why accept fear, uncertainty, shyness, miserable lacks: "Plenty for All Who Use Secrets of NATURLAW," is theme of inspiring 16-page book, MOUNTAINS OF GOLD. It's FREE! Win your share of life's good thru NATURLAW. Send name to **INSTITUTE OF NATURLAW, DEPT. Z40DN9, 2208-Main, Dallas, Texas.**

BE A DETECTIVE

WORK HOME or TRAVEL. Experience unnecessary. **DETECTIVE** Particulars FREE. Write to **GEO. Z. WAGNER,** 125 W. 86th St., N.Y.

For the Best Reading Pleasure Every Month

{ Read }

MAMMOTH WESTERN
AMAZING STORIES
FANTASTIC ADVENTURES

THE ZIFF-DAVIS FICTION GROUP

In recent issues, I thought that the story, "Blue Bottle Fly" by St. Reynard was very realistic. The reason I thought so is because I myself have often wondered whether we all are what we think, or just dreaming or something. Anyway, you get what I mean.

All in all, I think that FA is one swell magazine. And I'm going to subscribe very soon now. In the meantime, you know that you have another permanent fan.

Harold Ritzer
11563 3/4 Riverside Dr.
North Hollywood, Cal.

Welcome into the fold, Harold, and by all means let's hear from you again.....Ed.

WHERE ARE THE GALS?

Sirs:

Is it my imagination, or don't women read stf? One seldom sees a woman's letter in the Reader's section of FA. Could you have a pet hate on women, Ed? Or perhaps it's just that the gals are long on reading the magazine and short on writing. I am, for one, this being my first letter to any editor. I hope it gets into print.

I'd like to broadcast an appeal to all gal fans of FA. Especially in this area. How about wielding a pen more often and show the boys we're in there too!

Lee Rupard
Box 803 Univ. Sta.
Univ. of Kentucky
Lexington, 29, Ky.

We think that's a good idea, Lee. Come on gals, let's see some letters. Don't be bashful—we're all friends!..... .....Ed.

SPACE SHIPS AT WAR

★ **By A. Morris** ★

OUR MILITARY experts are urging scientists to develop rockets or space ships which can become part of our defense system. The ships would be sent so far away from earth that there would be no gravity to pull them back. They would just remain in space revolving about the earth. The experts say this is not impossible and that we will see the first space ships launched in ten or twenty years. First we have to discover new alloys and fuels and a method of launching rockets to such heights. Later on the ships may carry men but at first they will probably be ground controlled. They will be equipped with receivers and transmitters, and by signals sent from earth, they may be able to guide missiles across continents and oceans. It has been suggested that the ships carry giant mirrors which would reflect the concentrated rays of the sun on an enemy nation causing a drought and famine. This idea gives us all the more reason to help prevent a future war.

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

fantastic Facts

By LEE OWENS

WHY STREAMLINE ROCKETS?

IN RECENT years the horrible and stupid irrelevant use of streamlining has begun to be questioned by thinking people. With the coming of the airplane and the high speed automobile in racing, the design of projectile-like bodies to slip through air or water with the least resistance, influenced designers of almost everything so that today it is possible to buy *anything* from a kitchen knife to a radio, and find that they too have been streamlined. This is downright silly and is not of course typical of functional design.

Streamlining serves a legitimate purpose when it is applied to a vehicle or device which requires it. But modern automobiles for example do not require it—hence the average car looks ridiculous. Only in the last year or so are designers reverting to the square capacious "boxy" type of car ideally suited for its purpose of carrying passengers from one place to another comfortably. A good example of fine design in the automotive field is the commercial urban and inter-urban bus.

In science-fiction, shape and things to come has been seriously considered by both artists and writers and in almost all cases the space craft and rockets of the future are shown with slim streamlined lines. And all they need for justification of this practice is to point to current rocket and plane designs. They forget one thing however.

Present day rockets have limited power plants as do planes and they are designed to operate in the atmosphere. Therefore streamlining is justified—and necessary! But—and this is a big "but"—when rocketry reaches advanced stages and sends its products into interplanetary space pow-

FORGOTTEN MYSTERIES

YES, THEY ARE THE STRANGEST

These TRUE stories which haunt mankind—

—by R. DeWitt Miller, internationally known authority on the mysterious, scientifictionist, author of "The Master Shall Not Die," "Within the Pyramid," etc.

A quarter of a century of research went into this dramatic presentation of the REAL FACTS about *Lost Atlantis, Things Out of Space, Sea Serpents, Ghosts, Haunted Houses, Houdini, Possessors of Strange Powers,* and other great mysteries which baffle all men.

"Reads like fiction, but is fact, terribly authentic fact!"

The only book of its kind ever published.

These are the "Forgotten Mysteries" which ran for five years in *Coronet* magazine.

WALTER WINCHELL says: "The mystery of the flying saucers is not new. In *Forgotten Mysteries* R. DeWitt Miller offers two cases which perhaps will clear up the mystery."

AT ALL BOOK STORES — OR ORDER DIRECT.

SERRANO PUBLISHERS
457 SOUTH SERRANO AVENUE
LOS ANGELES 5, CALIFORNIA

Please send_____copies *Forgotten Mysteries* ($2.50 each). Enclosed $_____ check, cash, money order.
All orders shipped postpaid.

NAME_____

STREET_____

CITY_____ STATE_____

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

JULIUS UNGER INTRODUCES
THE FANTASY FICTION FIELD BOOK CLUB
5 Books for the price of 3—HOW?—Let me explain.
1. To join the book club—buy ANY book from the general listing and receive ANY book from items A to G absolutely FREE.
2. When you purchase any TWO additional books from the general listing—(retailing from $3 up) at any time during the following year, you will receive another FREE book of your own choice.
3. Furthermore—this second FREE book may be chosen from any titles shown in our general listings—now in print or forthcoming—(that normally retailed from $2.50 to $3.50).
4. That's a total of FIVE BOOKS for the price of THREE and for every future purchase of 3 books (retailing from $3 up)—you will receive another FREE book from your own choice that normally retails for $2.50 to $3.50.
YOUR CHOICE OF 1st PREMIUM BOOKS OR ITEMS from Those Listed Below
A. Well of the Unicorn—Fletcher
B. The Mislaid Charm—Phillips (2 Dust Jackets)
C. Fantasy Book
D. Rhode Island on Lovecraft
E. Fantasy Calendar for 1949
F. Greener Than You Think—Moore
G. Moon Pool—Conquest of Moon Pool—Ship of Ishtar—(All Fantasy Novel issues—Magazines)—All 3 as one choice—All by A. Merritt
GENERAL LISTINGS
World Below—S. F. Wright.$3.50
When Worlds Collide and After Worlds Collide (Balmer & Wylie)...each 2.75
Strange Ports of Call—Anthology... 3.75
Checklist of Fantastic Literature... 6.00
31st of February—Bond...$3.00
Life Everlasting—Keller... 3.50
The Homonculus—Keller... 3.00
Pilgrims Thru Space & Time—Bailey... 5.00
People of the Comet—Hall. 2.00
JULIUS UNGER ☆ Box 35, Brooklyn 4, New York

AMAZING NOVELS 25c EACH!
SLAVES OF IJAX by John Fearn. Amazing Science Fiction Novel. Over 45,000 words..25c
MAGIC FOR MURDER by A. Livingston. Over 60,000 word FANTASTIC COMPLETE NOVEL!..25c
OCCULT—A collection of stories of the Supernatural. 8 THRILL-PACKED TALES!...25c
Thrill to 1 or all 3 great paper-cover booklets! Write TODAY for our FREE illustrated catalogs of Science Fiction, Fantastic-Adventure, Weird.
READERS SERVICE BOOK CLUB
119 E. San Fernando St. (Dept. D-1) San Jose, Calif.

EXPORT PAYS BIG

World Trade firm offers men and women plan for big pay positions or unlimited-profit businesses of their own in Export-Import. Mail order World-wide without capital, from home or travel abroad. Write today for Free Book. State if veteran. Airmail reaches us over night. The Mellinger Co 1422-HO Westwood, Los Angeles 24, Calif.

DO YOU WANT TO STOP TOBACCO?

Banish the craving for tobacco as thousands have with Tobacco Redeemer. Write for free booklet telling of injurious effect of tobacco and of a treatment which has relieved many men.
35 Years in Business
300,000 Satisfied Customers
THE NEWELL COMPANY
284 Clayton Sta., St. Louis 5, Mo.
FREE BOOK

Learn To MOUNT BIRDS

TAN SKINS—MAKE UP FURS
Be a Taxidermist. We teach you at Home. Mount Birds, Animals, Pets, Heads, Fish. Save your hunting trophies. Decorate home and den. Make Money. Mount and tan for others. Fun and Profits! Don't delay. WRITE TODAY—NOW—for FREE BOOK with 100 game pictures. Hunters, get your copy—It's Now Free. Send post card. State your AGE.
N. W. SCHOOL OF TAXIDERMY, Dept. 4311, Omaha, Nebr.

HOLLYWOOD Model of the Month
A beautiful Hollywood Model is selected each month . . . and portrayed in 5 glamorous color poses. Send for "Miss November" Now!
Set of 5 Color Slides...$2.00
Set of 5 Fine Grain Negatives... 1.00
Address all orders to
JAMES J. BRADFORD
1302 Broadway Burbank, Calif.

ered with atomic engines, the shape of the vessel is likely to be far from streamlined. As long as the rocket or space ship is in the atmosphere, streamlining serves a useful purpose. But this time is only a minute fraction of the time the rocket will spend anywhere. Most of its life will be in empty space where streamlining has no significance whatsoever. A cube or pyramid would be just as efficient. The spaceships of the future are going to be designed with other things in mind—always remembering of course that super powerplants are in operation and that atmospheric flight is negligible. A consideration that will govern rocketeers is this: what shape of a space ship gives the greatest volume for the minimum amount of structural material in it? What shape is the strongest for the amount of structural material in it? There is only one answer—possibly two—a sphere —or an ellipse.

A sphere as anyone knows from elementary geometry has the greatest volume for its surface—and the greatest strength. Therefore it is reasonable to assume that the great space-ships of the coming age will be sphere-shaped. Because of their gigantic power plants they will shoot through the atmosphere like the feeble rockets of today, but will rise slowly and majestically until they reach free space where no air will oppose their flight. The cult of streamlining senselessly will finally have been licked!

What we are saying in essence is that functional design is the important thing—not simple appearance. This goes for things today as well as in the future. The modern degenerate automobile being of course the best example of poor design, as bloated and swollen, with poor visibility, it floats down the highway, a piece of streamlined metal.

On the other hand to be fair to many new designs, in homes, in furnishing, in tools and in a host of objects, good design is evident. Why streamline a radio or television set?—it isn't going anywhere. The same is true of a million static objects. Instead, make them serve the purpose for which they're intended.

Many early designers recognized this unwittingly and their work is still commendable today. Early American furniture for example is simple, pleasing to the eye, strong and sturdy, and useful to the end of its life, which not yet in sight. All over the United States, designers are at last utilizing the principles of that great school of modern design which flourished at the Bauhaus, and the result is that modern devices are becoming more sensible. Cheer up, everyone; we won't have to put up with streamlined bathtubs much longer! Remember a bath tub is used for taking a bath—not flying to Timbucktoo!

***

GUN CRANKS

AMAZING STORIES and FANTASTIC ADVENTURES have both made it a

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

point to present information on scientific amateurs, like the radio "hams" and the telescopic "nuts", for these people contribute a definite, useful amount of work to American welfare and prestige. While they pursue these interests through the eyes of hobbyists, they may be regarded as more than mere hobbyists—there is a world of difference in viewpoint between say, a stamp collector and a radio ham.

Another type of hobbyist must be invited to join the confraternity of scientific amateurs. This time we are referring to the gun collector or more properly the amateur gunsmith. There are tens of thousands of people who pursue this interest, on a scientific basis and other tens of thousands who merely are collectors. It is the gunsmith type we're interested in.

An amateur gunsmith will make a rifle from regular steel stock, building it from start to finish including doing all of the machining and woodworking. Or he may, as is more common, convert a rifle—usually a cheap military weapon—into a fine quality piece. This requires technical and scientific skill of the first order. Furthermore there are many branches of this hobby ranging from a chemical study of gunpowders to the ballistics of projectile flight. All of these things are intensely practical and useful. Our government in both war and peace has encouraged this hobby.

The Bill of Rights grants Americans the privilege of bearing arms—a privilege which is a guarantee against despotism. It must be remembered that the first thing a dictatorial government does, is to confiscate the citizens' weapons.

Little Switzerland which has preserved its freedom so successfully, has done so partially through the fact that its citizens are all experienced in weapons handling. American gun enthusiasts want the same thing.

It might be mentioned that amateur study of ballistics has produced fine scientific advancements, seriously considered by the professional. And ballistics, now that the rocket has appeared on the scene, is of great importance these days!

* * *

VIEWPOINT. . .

ORDINARILY we think that we know all about whatever we're looking at—but that's often a mistake. There are more things to be discerned through the eye of the specialized observer than is generally thought. Consider wire, for example.

Men had been handling wire, looking at it, and using it in electrical apparatus for a hundred years or more. Until about thirty years ago—possibly twenty—with the growth of radio, a piece of wire was generally characterized by giving its size, its insulation, if any, and its resistance, the quantity which measures its opposition to the flow of electric current in ohms. But

"DO YOU WANT TO BECOME A HEQUAZ NUMEROLOGIST?"

Something New *Something Different*

TAKE OUR NEW ADVANCED COURSE IN
"HEQUAZ SYSTEM OF NUMEROLOGY"

SOMETHING THAT WILL COMMAND BIG MONEY In this course you are trained to interpret numbers and letters of the alphabet, to indicate the time future events will occur, without allowing the client to talk until the Forecast is completed.

We will advise and help you until you feel confident of your work. If you wish to come and have personal instructions this can be arranged.

At the completion of your studies and passing of your test you are awarded a certificate.

NO ONE CAN USE THIS SYSTEM OF NUMEROLOGY WITHOUT THIS CERTIFICATE

Act Now!

ENROLL AND BECOME ONE OF OUR SUCCESSFUL GRADUATES

HEQUAZ CORRESPONDENCE SCHOOL
OF NUMEROLOGY
268 North State Street Marion, Ohio

Without cost or obligation, please send me full particulars about the "HEQUAZ SYSTEM OF NUMEROLOGY."

Name..... Age.....

Address.....Type of Work.....

City..... State.....

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Watch Repairing Pays Big Money Learn at home

Free Literature Tells How

Watchmakers in big demand. You train step-by-step under experts. You learn to take a watch apart—repair and put in perfect working order. 10 easy lessons. We furnish all tools, and a 15 jeweled watch. Practice movement with first lesson.

Turn spare time into cash—perhaps a business of your own. A licensed school. Students 18 to 65 have profited by our training. Low cost.

Write Today for All the Facts—No Obligation

WATCH REPAIRING Dept. ZD-11 2570 Elston Ave. Chicago 18, Ill.

BOYS! Here's the real thing! Just what you're looking for . . . You'll have the time of your life! 10 small different booklets with chockfull funniest cartoons (and other HOT offers). You'll be missing plenty—if you don't buy 'em NOW. Don't delay! Send a BUCK and we'll ship this fun-packed package prepaid. No C.O.D.

NUDKI, Dept. 207 Box 126-BO., New York 1, N. Y.

SMART! ONE CARAT GENUINE ZIRCON RING

A man's ring with a gorgeous carat size GENUINE ZIRCON in a very artistic setting of rich Yellow Gold Plate. Now at a special low price. Only..... $7.95

SEND NO MONEY. Pay Postman on delivery plus 20% Fed. Tax and postage. If this ring does not look as good as a $150.00 ring to you, we will gladly refund your money.

CLARK RING CO., Dept. 1297
Box 5151 Chicago-80, Ill.

BARGAIN BAR-BELLS! 8.95 UP

BUILD your chest, arms, neck, shoulders, thighs as Nature intended! Have a magnificent new body in Less Than 3 Months,—Only 5 Minutes a Day! 4 Million Men, Coast to Coast, 8 to 80, are doing this—YOU CAN, TOO! Get details about Paramount Bar Bells and System—finest on the market—at Factory-Price Savings up to 30%. Send NOW for your "Power-Thru-Paramount" Self-Check Health Chart. Just say—"Send Chart." It's FREE! Write TODAY!!

INDEPENDENT IRON WORKS, Dept. ZD
2416 E. 23rd St. Los Angeles 11, Calif.

QUIT TOBACCO!

Remove all tobacco craving safe in every form and join the thousands who have obtained satisfactory freedom from tobacco with TOBACCO BANISHER. Send for FREE BOOKLET describing the ill effects of tobacco and our safe reliable home treatment, a proven success for 88 years.

GUSTAF H. GUSTAFSON CO.
2325 E. Vickery Blvd. Dept. FG Ft. Worth 3, Texas

BRINGING RELIEF TO
ATHLETE'S FOOT
SUFFERERS
HADLEY'S LOTION

Carries a money back guarantee. Also relieves many other body itches. Remember no risk. Send $1.00 for a 3 oz. bottle. Postpaid. M. & W. Laboratory, 223 So. Carmelina St., West Los Angeles 24, Calif.

wire, used in certain applications exhibits some amazing properties.

Consider a straight piece of wire stretched across a roof top to serve as an antenna for a radio. Suppose another wire were to be connected to the center of the stretched wire and leading to the antenna terminal of a radio receiver. That wire possesses a lot more than resistance and wire size. It is in effect a complete electrical tuned circuit suitable for receiving a certain band of radio waves.

And as far as the receiver is concerned, to it appears a definite series of electrical quantities called impedance. Thus every antenna has along its length an electrical nature called its "impedance" at that point. Now what does this mean in practical terms—simply this—the impedance of the wire connected to the antenna, the impedance of the input coils of the receiver, must be the same of the greatest amount of "signal" is to be received. It is astonishing how long it took for this idea to settle firmly in the minds of the builders.

Then came radar and TV. These two new branches of the radio art made the study of antennas strictly scientific—and important beyond conception. Today the most important part of a radar or TV receiver is the antenna which surmounts it. As with ordinary radio, an inferior antenna can be used, but here the consequences are more serious—unlike simple long wave radio—reception is sadly decreased.

A modern high frequency broadcasting unit, whether it be a radar transmitter, a TV transmitter, or a ham set, is invariably surmounted by a weird antenna arrangement. It may be a parabolic bowl, or a dipole with reflector, or a dipole with a director, or a stacked antenna array. Whatever it is, it serves the use-function of delivering the greatest amount of energy into free space.

When space ships become commonplace, you can rest assured that they are going to carry antennas. The antennas may be buried behind the walls of the ship through radio-transparent coverings—but they'll be there. Communication is too important these days and is becoming more so. With the advent of space travel, Man's link with his fellow man will be even more dependent on the tenuous thread and invisible warp and woof of a shimmering invisible blanket of radio waves. Keep the antennas working—or your sets will be worthless...

* * *

HALF AND HALF

THE IMPORTANCE of radio and electronic equipment in aviation is generally appreciated, but it isn't often realized just *how* important those things are. For example, it is now recognized that about half the cost of a modern bomber or fighter goes into electronic gadgets, navigation material and electronic robots of one kind or another!

This astonishing total will probably in-

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

crease instead of decrease. Modern planes are becoming so complicated and so huge that the pilots require hosts of additional gadgets to help them fly and land the monsters. And naturally electronics and radio provides the many tools and instruments. The days are one when men fly aircraft "by the seat of their pants" as was so common prior to the Second World War.

An operation like the Berlin Airlift could hardly take place with such precision and rapidity without electronics. The planes are handled at minute and a half intervals, only because so much of the routine is lifted from the pilot by his machines and instruments.

Jet planes operate at tremendous speeds and with tremendous accelerations. No human being can respond quickly enough to meet every available contingency. Human reflexes are too slow. Thus a jet engine, overheating, might burn out before the pilot observed the increasing temperature on the instrument panel and made the proper corrective measures. But electronic devices have reflexes measured in millionths of a second. They react to all intents and purposes instantaneously. And the engines are shut off the minute trouble impends.

As time goes on and increasingly large and complicated variations of our present rocket, jet, and turbine aircraft are developed, so will the mass of protective instruments and gadgets increase. The duties of a pilot in such vehicles require him merely to stay alive and guide the ship—he can't watch everything. And so he employs mechanical engineers. Already too, we see the increasing use of radio powered ground controlling apparatus. Perhaps the day of the robot aircraft is much nearer than we think. There is a law of diminishing returns where complex machines are involved. Human beings must employ time-extensions of their abilities, namely electronic devices, simply in order to operate the machines at all.

* * *

"COOKIE-TOSSER"

THE MEDICAL world is agog with news of a drug—still highly secret—originating in Europe, which has the extremely valuable property of making alcoholics nauseous when in range of sight or smell of alcohol.

The existence of the drug is worth reporting because in this country alone, the number of confirmed alcoholics, who may be really regarded as sick people, runs into the many hundreds of thousands, if not millions. All treatments for alcoholism have so far been only partially successful and even the most well intentioned reformers tend to back-slide into the hideous despair into which excessive use of alcohol leads.

This new drug whose identity has not been disclosed, is administered in small doses. The result is that if the one so dosed even smells, much less sips, alcohol, he be-

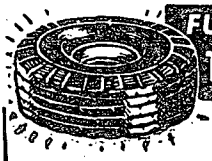
AUDELS Carpenters and Builders Guides 4 vols. $6

Inside Trade Information for Carpenters, Builders, Joiners, Building Mechanics and all Woodworkers. These Guides give you the short-cut instructions that you want—including new methods, ideas, solutions, plans, systems and money saving suggestions. An easy progressive course for the apprentice and student. A practical daily helper and Quick Reference for the master worker. Carpenters everywhere are using these Guides as a Helping Hand to Easier Work, Better Work and Better Pay. To get this assistance for yourself, simply fill in and mail FREE COUPON below.

Inside Trade Information On:
How to use the steel square—How to file and set saws—How to build furniture—How to use a mitre box—How to use the chalk line—How to use rules and scales—How to make joints—Carpenters arithmetic—Solving mensuration problems—Estimating strength of timbers—How to set girders and sills—How to frame houses and roofs—How to estimate costs—How to build houses, barns, garages, bungalows, etc. —How to read and draw plans—Drawing up specifications—How to excavate—How to use settings 12, 13 and 17 on the steel square—How to build hoists and scaffolds—skylights—How to build stairs—How to put on interior trim—How to hang doors—How to lath—lay floors—How to paint.

AUDEL, Publishers, 49 W. 23rd St., New York 10, N. Y.
Mail Audels Carpenters and Builders Guides, 4 vols., on 7 days' free trial. If OK I will remit $1 in 7 days and $1 monthly until $6 is paid. —Otherwise I will return them. No obligation unless I am satisfied.

Name_____
Address_____
Occupation_____ ZIP
Employed by_____



FULLY GUARANTEED TIRES COST LESS!

Nationally famous FIRESTONE, GOODRICH, U. S. ROYAL, GOODYEAR, and other makes. Trucking Fleets, Busses, Hospitals and Schools buy from PYRAMID with confidence. Every tire selected and inspected for your safety!

550x16	$4.45	750x16	$6.95	750x20 (8)	$10.45
600x16	4.65	600x20	7.95	34x7	12.45
650x16	4.95	700x20	9.95	825x20	13.45
650x15	4.75	32x6 (8)	9.95	900x20	13.95
700x15	4.95	32x6 (10)	11.45	1000x20	14.95
700x16	5.45				

AAA—PREMIUM GRADE—Guaranteed to Give Longer Service

600x16	$5.95	600x16 (6)	$7.95	750x20 (8)	$11.45
650x16	5.95	600x20	9.95	34x7	14.45
650x15	5.95	700x20	11.95	825x20	15.45
700x15	6.45	32x6 (8)	11.95	900x20	15.95
700x16	7.45	32x6 (10)	12.95	1000x20	16.95
750x16	7.95				

MILITARY "ALL-PURPOSE" TREADS

900x16	$9.65	1000x20	$16.95
900x20	14.95	1100x20	18.95
750x20	9.95	1400x20	22.95

600x16 MILITARY "NEW TREAD" TIRES $8.95

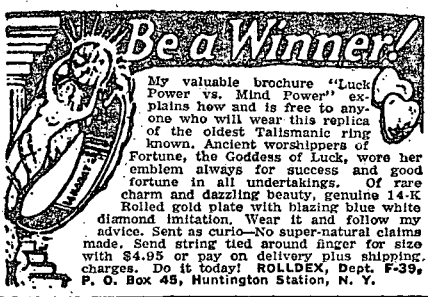
TRACTOR TIRES AND OTHER SIZES IN STOCK

Largest stock of used tires in the East. Thousands of satisfied customers. Tires shipped to all parts of the world. Mail orders given personal attention. Send Money Order or Check with order.

PYRAMID TIRE CO.
1335 N. Fifth St.
Dept. Z, Phila. 22, Pa.

ILLUSTRATED COMIC BOOKLETS
Sell our ILLUSTRATED COMIC BOOKLETS and other NOVELTIES. Each booklet size 4½ x 2¾. We will send 25 assorted booklets prepaid upon receipt of $1.00 or 75 assorted booklets sent prepaid upon receipt of $2.00. Wholesale novelty price list sent with order only. No orders sent C.O.D. Send Cash or Money order. Rosao Sales Co., 65 Fifth Ave., Dept. 40-N, New York 3, N. Y.

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED



My valuable brochure "Luck Power vs. Mind Power" explains how and is free to anyone who will wear this replica of the oldest Talismanic ring known. Ancient worshippers of Fortune, the Goddess of Luck, wore her emblem always for success and good fortune in all undertakings. Of rare charm and dazzling beauty, genuine 14-K Rolled gold plate with blazing blue white diamond imitation. Wear it and follow my advice. Sent as curio—No super-natural claims made. Send string tied around finger for size with $4.95 or pay on delivery plus shipping charges. Do it today! ROLLDEX, Dept. F-39, P. O. Box 48, Huntington Station, N. Y.

Learn Profitable Profession in 90 days at Home

Men and Women, 18 to 50

Many Swedish Massage graduates make big money. Large full time incomes from doctors, hospitals, sanatoriums, clubs or private practice. Others make good money in spare time. Prepare for future security by training at home and qualifying for diploma. Anatomy Charts and 32 page illustrated Book FREE—Now! The College of Swedish Massage, Dept. 953-P, 41 E. Pearson, Chicago 11

THEY'RE SUPER SCOPES!

36" 17 POWER

Extends to 36 inches. Precision and Polished Lenses. Ideal for Studying Stars, Plane Spotting, etc. Satisfaction Guaranteed or Money Refunded. Send Check or Money order to

$2.95 Postpaid

CRITERION CO., Dept. D-10
438 Asylum St., Hartford 3, Conn.

LEARN HOW TO HYPNOTIZE

Amazing self-study lessons . . . in simple, easy to understand language. How to select a subject—how to hypnotize by telephone—how to make money from hypnotism—mental telepathy—stage hypnotism—self-hypnosis; how modern hypnotism is used to conquer inferiority complex, fear, battle fatigue, timidity, etc. Clear helpful pictures show operating positions, movements. Money-back guarantee. Only $1.95, postpaid—or COD, plus postage. Write today!

Nelson-Hall Co., 1139 S. Wabash Ave., Dept. L-56, Chicago 5, Ill.

LEG SUFFERERS

Why continue to suffer without attempting to do something? Write today for New Booklet—"THE LIEPE METHODS FOR HOME USE." It tells about Varicose Ulcers and Open Leg Sores. Liepe Methods used *while you wait*. More than 40 years of success. Praised and endorsed by multitudes.

FREE BOOKLET

LIEPE METHODS, 3284 N. Green Bay Ave.
Dept. M-71 Milwaukee, Wisconsin

Is Your Life Crowned With Success?

LEXIPOWER

WE THINK IN WORDS. THOUGHT IS POWER. Let this New Science show you how to WIN WITH WORDS—financially, socially, culturally. Develop a MASTERFUL VOCABULARY. Influence others, improve your personality, manifest your latent ability. You are judged and rated by every sentence you utter. Start using the POWER of LEXIPOWER after the first Lesson. Write NOW for FREE details about LEXIPOWER. Dime-a-Day LESSON CLUB.

LEXIPOWER COMPANY
517-K W. Deming Place Chicago 14, Illinois

ILLUSTRATED BOOKLETS & NOVELTIES

Our VEST POCKET series of ILLUSTRATED COMIC BOOKLETS are full of humor with ILLUSTRATIONS. The NOVELTIES are the kind MEN want for EXCITEMENT and AMUSEMENT. 10 DIFFERENT booklets and 6 DIFFERENT novelties sent prepaid on receipt of $1.00. No C.O.D. orders or checks accepted. WHOLESALE PRICE LIST included with orders only.

LIVE WIRE NOVELTY CO., Dept. 8-N
212 Cooper Station New York 3, N. Y.

comes extremely nauseated and the contents of his stomach leave him. Apparently the effect persists. From what has been reported, users of the drug, previously confirmed alcoholics, have been unable to go near a drink of any kind.

Time reported the incident wherein a Swedish hostess obtained some of the drug and without prescription-advice, placed it in the drinks of her guests. Within a few minutes, all of them were violently ill, some seriously so, that they required hospitalization. Hence it can be seen that the drug is dangerous and must be administered by prescription if at all.

We are glad to know that such a drug has been discovered. It will be a boon to medicine if it is all that the reports make it out to be.

It is not generally realized that alcoholism is a very serious problem particularly in the United States. We don't ordinarily class alcoholics with regular drug users, like opium addicts, but there is a surprisingly similar relationship. Alcoholism is a sickness, a vicious, harmful sickness, for which no complete cure has yet been discovered—with the possible exception of this drug. Our mental hospitals are filled with the wreckage of alcoholism.

Contrary to some opinions, alcoholism is generally regarded by psychiatrists as a symptom rather than a cause of disease. One becomes an alcoholic and does strange things, rather than one does strange things and becomes an alcoholic. If this drug is all it is cracked up to be, medicine will be grateful. Already thousands of inquiries have been received, asking where it may be obtained. The matter is under the surveillance now of the American Medical Association which is attempting to assess its true value.

What makes alcoholism so insidious is that it manifests itself slowly over a period of time, and hence, one is caught before he knows it. Thank God, that some cures are becoming evident!

* * *

PARADOX!

IF YOU asked a biologist what was the smallest form of living matter, he would automatically reply, "the virus." And it is so. Filterable viruses as everyone knows are of the same order of size as large chemical molecules. And that introduces the paradox.

Filterable viruses may be regarded from two diametrically opposite viewpoints; they are simple straight forward chemical molecules—*and they are living cells!* This paradox cannot easily be resolved and it is generally agreed that it lies at the mystery of life. It is possible to treat a virus chemically just as one would manipulate any chemical. But under other circumstances, the virus will become malignantly alive. An example of this: the tomato bushy stunt as

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

is called can be crystallized in the form huge rhombic crystals. The crystals can stored along with copper sulfate and rock lt just like those inanimate substances. ut put the material virus on a tomato ant and it turns into a destroying malig- nt animal-like living thing!

Undoubtedly the secret of life is closely nked up with observations of this sort. hat the explanation is we don't know. ıt biochemists aim to find out. It is dan- rous now to say that man cannot create e—for it appears that in the very near ture some skilled biochemical engineer going to create a virus, synthesize it, om some common chemicals—and it will e! This is no dream but very near real- . When that happens, what shall we say? r this is true life—in a virus.

Discussions of this sort bring up another ıtter which required clarification. Most entists it seems have taken the view- nt that life as we know it is almost ariably—in fact *is* invaribly—a pheno- non based on a carbon cycle chemistry. ierefore when the question of life on ıer planets and worlds in our Solar Sys- m or elsewhere in the Universe come up, ientists say that it is unlikely that life n exist elsewhere. But they are always inking in terms of the carbon life cycle! this necessarily true?

While so far we have found that all life hich we know is based upon the carbon le, it does not necessarily seem an auto- tic consequence that all life *we can ever* ow will have to be the same. Maybe in ne remote system, the silicon or the ger- nium cycle exists. Who can say? It is ıply a matter of speculation and here it ıears wise not to be too dogmatic. Science ips ahead too rapidly.

Similar to the virus in that it is essen- lly a large molecule, is the gene, that ic unit of heredity. The gene in a way y be regarded as the link between ani- e and inanimate matter too. It cannot sub-divided. If it is, it is dead. Yet it aves in many respects like a huge mole- .

he questions brought up above, lead us believe that one of the most important ds of scientific advance is going to be hemistry—joined with biophysics. The sicist is providing the electrical tools ch enable the biologist to probe further the nature of life—and things. And loubt the intense electrical nature of will be confirmed, just as electricity been found to lie at the core of every- ıg else. What a fertile and productive ıod the next few decades are going to be his field!

* * *

MERCIFUL ELECTRONICS!

OW OFTEN have we cried that sci- ence moves too fast for us to keep

No sooner is an idea thought of than ıppears in a concrete factual form. If

The Handsomest NECKTIE BUY Of The Year!

Your NAME or INITIALS Beautifully MONOGRAMMED!

Win the admiration of your friends with this richly styled "individualized" necktie. Your name or initials inscribed in a design of your own choice absolutely FREE! Ties are smartly tailored in smooth lustrous satin with a choice of EIGHT solid colors: Navy, Royal, Wine, Maroon, Brown, Mist Green, Dark Green and Terra Cotta. Timely for Teams, Clubs, etc. Orders promptly filled. If not entirely satisfied, return merchandise within 5 days for refund!

$1.50 each

SACHS SALES CO., Dept. M, 812 Merchandise Mart, Chicago 54, Ill.
Please send me_____Tie(s) @ $1.50 ea.
Colors: 1st_____; 2nd_____
Check Style: Initial(s)_____1st Name_____
I am enclosing check (or M.O.).
Name_____
Address_____
City_____State_____

SAVE POSTAGE! Send check or M.O. with order, we pay postage.

DRUNKENNESS

DO YOU WANT RELIEF? Drunkenness ruins Health, Happiness. BREAK THE DRINKING CYCLE QUICKLY. Use ALCOREM, the amazing liquid that intends to promote aversion (dislike) toward ALL intoxicating drinks. Not classed as a permanent "cure," but it IS a recognized method of withdrawal of alcohol. Interrupts drinking cycle and causes many to turn from liquor. May be taken in SECRET. A few drops of this wonderful ALCOREM eliminates desire for more alcohol. GUARANTEED Pure and Effective. Aversion treatment is recognized by Medical Authority. ALCOREM comes ready to use—simple instructions included—NO BOOKS TO READ—need not cause excessive time out from work or social duties. One happy ALCOREM user writes: "PLEASE SEND ME MORE WONDERFUL ALCOREM AT ONCE FOR A FRIEND WHO IS A HEAVY DRINKER. I BOUGHT FROM YOU BEFORE AND HAD WONDERFUL RESULTS." As an additional help we send . . .

FREE! 21 PINKIES with order of ALCOREM Special Formula capsules to help nervous and digestive system also, FREE WEIGHT CHART. Acts as guide in building reformed drinker to proper weight.

SEND NO MONEY—ORDER NOW

SATISFACTION OR MONEY BACK. Send name and address. We rush ALCOREM, FREE PINKIES and FREE Weight Chart. Mailed in plain wrapper. Pay postman only $4.95 and small C.O.D. charge. TO SAVE C.O.D. CHARGE SEND $4.95 WITH ORDER.

MIDWEST HEALTH AIDS • DEPT. P-10
608 SO. DEARBORN STREET • CHICAGO 5, ILL.

IF I Send YOU THIS FINE SUIT—

Will You Wear It and Show It to Friends? I need a reliable man in your town to get a fine, made-to-measure, all-wool suit without paying cash, but by taking a few orders from friends. Wear it—show it—to help you take more orders with my line of nearly 100 guaranteed quality fabrics. You can make up to $12 in a day without experience or investment. I supply everything required FREE. Write for FREE outfit. John Grant, STONE-FIELD Corp., 532 S. Throop St., Dept. Y-877, Chicago 7, Ill.

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

New Low Price!
IMPORTED SWISS STOP
CHRONOGRAPH
with 2 Push Buttons

WRIST WATCH. Plus 69c Fed. Tax..... $6.90
WRITTEN GUARANTEE GIVEN. Stainless Metal Stretchband. Tells Time • Stop Watch measures SPEED; measures DISTANCE. "Wonder" Watch. Used to time airplanes, autos, horse races, athletic events.
FREE Instructions Included.
PLUS 8 BIG FEATURES
• Chrome Plated Case • Precision Made • Unbreakable Crystal • Tachometer • Large Red Sweep Hand • Telemeter • Hands & Numbers Glow in Dark • Attractive Dial
7-Day Money Back Guarantee
Used by Aviators, Engineers, Sportsmen, Doctors, Army, Navy, Air Force Officers, Navigators, Photographers.
SENT ON APPROVAL. Deposit $6.90 plus tax and postage with postman or send money order, save postage. (Same money back guarantee.)
THE JEWELBOX, Dept. AN, 1674 Broadway, New York 19, N. Y.

61 Shudder STORIES
Yours To Read FREE!

The Borrowed Body . . . The Spectral Lovers . . . Killing By Willing . . . The Curse of Moy . . . The Vacant Vault . . . When the Banshee Strikes . . . a book of chilling, thrilling shockers! "Completely fascinating."—John Vandercook. Stories collected by a hard-headed reporter who faces the Unknown! Are they true?
READ IT FREE FOR FIVE DAYS!
Send $2.50 to Storm Publishers, 507 Fifth Ave., Dept. 1234, New York 17, N. Y. Receive Out of the Silence, by Patrick Mahony, on approval. Complete refund guaranteed if returned in five days. Order now!

CLASSIFIED ADVERTISING

Song Poems

POEMS wanted to be set to music. Free examination. Send poems today to McNeil, Master of Music, 510 2D South Alexandria Ave., Los Angeles, Calif.

Miscellaneous

MAGAZINES (back dated), foreign, domestic, art. Books, booklets, subscriptions, etc. Catalog 10c (refunded). Cicerone's Center, 863 First Ave., New York 17, N. Y.

SCIENTIFICTION weird, fantastic: books, magazines. Werewolf Bookshop, 1508A Riverside Dr., Verona, Pa.

FANTASTIC Fiction! Sample, $1.00. Catalog 10c, (refunded). Stone, Lunenburg 21, Mass.

WOULD you pay 3% first $350 made? Illustrated book "505 Odd, Successful Enterprises" free. Work home. Expect something odd. Pacific 5M, Oceanside, Calif.

BOOKS, Magazines (back dated). Send dime for list. Clark's, 302 N. Junction, Detroit 9, Mich.

24 CARD Tricks, 25c. Police Ju-Jitsu, 50c. Hirsch, Spring Valley 1, N. Y.

EARN money evenings, copying and duplicating comic cartoons for advertisers. Adservice, Argyle (7), Wis.

MAGIC taught by mail. Free information and magic book, 25c. Magic School of Science, Dept. Z, 716 Pine St., St. Louis, Mo.

HIGHEST cash for old, broken jewelry, gold teeth, watches, silverware, diamonds, spectacles. Free information. Satisfaction guaranteed. Government Licensed. Rose Smelting Co., 29-ZD East Madison, Chicago, Illinois.

START your own business on credit. Always your own boss. 1554 Dealers sold $5,000 to $26,500 in 1948; their average $6,742. We supply stocks, equipment on credit. 200 home necessities. Sales experience not needed to start. Wonderful opportunity to own pleasant, profitable business backed by worldwide industry. Write Rawleigh Co., Dept. K-U-ZDF, Freeport, Ill.

SELLING entire collection of over 500 Science & Weird fiction mags, some dating back twenty years. Fred Claassen, 1012 Summit Ave., Bronx 52, New York.

SELL DuPont Nylon Uniforms. Sell complete line famous Hoover uniforms for beauty shops, nurses, doctors, waitresses, others. Exclusive styles, best quality, splendid values. Exceptional income. Real future. Equipment free. Write fully. Hoover, Dept. A-113, New York 11, N. Y.

this article comes to the attention of an blind persons, we want them to take n false hopes and to view the article throug the same enthusiastic probe that we hav used. Some time ago we suggested that elec tronics would eventually provide a machin which would *read aloud*, any book to whic it was applied!

This astonishing and daring suggestio is no longer a figment of the mind; it i fact!—with reservations. It has recentl been reported that a machine, using a com bination of a cathode ray tube and a phot cell, along with disk recorders and an am plifier, has been constructed. This devic is now capable of reading letters of a boo —letter by letter—in other words spellin aloud.

The way it works is like this: a book t be read is placed in a frame so that th scanner can be run parallel to the lines o type. The scanner is swept over the typ and recognizes each individual letter. In ac cordance with the letter scanned, electric impulses are sent out. These impulses ar keyed, through a series of relays to a sec tion of the machine which houses a num ber of small wheels, each of which is mag netized with one letter of the alphabet. Th appropriate impulses trigger the correc wheel and from the amplifier comes the sound "ay" or "oh" or "zee" or whatever i might be!

Immediately, before the machine is re leased for the public, engineers are seekin a way for it to pronounce words—just lik the human voice—as the scanner sweep over the page. And it is unquestionabl merely a matter of time before this is don Already it appears as if success will be ha through a system of pronouncing not word but syllables.

This tremendous aid to the blind wi permit them to read practically any boo or newspaper in print and will elimina the tedious, slow, long drawn out techniq of the Braille system. It is just a bit to early to say the problem has been solve —but it will be—and in not too long a tim Are there no miracles incapable of bein created by technology?

The gigantic strides made by applie science and engineering are beginning to b felt in the everyday world. In another te years, who knows what tremendous mir cles may come from the electronicist labs?

* * *

ASTRONOMY IN LEGEND

IT IS NO coincidence that astronomy an astronomical references are foun threaded throughout all mythology. A tronomy is the oldest science known to ma The stars always confronted men with the gigantic enigma—what was more logic than that men should include them in the legends and their mythological tales. Th scintillating sparkling constellation of th Pleiades is surrounded by an enchanti legend.

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

The Pleiades were supposedly the daughters of the goddess Diana and of the powerful Atlas. The mighty hunter Orion, son of Neptune became fascinated with them, and being a god of action he took out in full pursuit. The Pleiades ran but fearful of being caught, they prayed to Jupiter who took pity on them and changed them into seven doves—though one of them left the constellation to avoid seeing the sack of Troy—thus accounting for the six stars visible in the constellation of the Pleiades. The one who left chose to become a comet—Electra—and her hair streams out behind her.

It is fascinating to note how the mythical explanations take account of such things as the comets' tail by making it the hair of a goddess. The fertile imagination of the experts who compounded early Greek mythology forsook nothing. And of course with time the tales varied and changed considerably. The very names of the constellations point out clearly their mythological origin. Several times in the last few decades, groups of nationalists have suggested the whole background of constellation mythology be thrown out and forgotten, and in its stead, the names of national heroes and political figures and images be placed. Fortunately such suggestions haven't gotten far.

According to some of these people who would change the names of the stars, a typical example of the change would involve the Big Dipper. This was to become the flage of whatever nation made the suggestion! Thank the good Lord that such childish ideas have never taken hold. Today, those who have occasion to refer to the stars do so in terms of mythology whatever their nation or language—with very few exceptions.

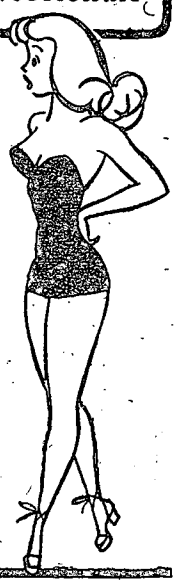
* * *

OLD STUMPS

SCIENTISTS have found a gold mine in old pine stumps found in Southern forests. Most of the stumps were left by saw mills which took out the lumber years ago. Now the stumps are being pushed out of the ground by huge bull-dozers. The stumps are washed and shredded and the chips are put in huge boilers where steam and chemicals separate the rosin, turpentine and oil found in the pine. These products can be used in various ways. For thinning paint, for soap-making, and for producing lacquers and waxes. Some of the by-products are used in the manufacture of ink, shoe-polish and plastics. The rosin and turpentine is used in the making of linoleum, adhesives, disinfectants, matches and even perfumes. New uses for the products taken from these seemingly worthless stumps are being found every day. Just this year an insecticide was produced with a turpentine base which is very successful in combatting certain insects which attack cotton plants.

CARTOONING

Taught by 9 Professionals



YOU CAN LEARN BY MAIL

A new idea in cartooning schools—45 lessons by NINE Famous Professionals:—Boltinoff, Lariar, Nofziger, Roir, Ross, Roth, Salo, Schus and Wolfe. Over 2,000 instruction Drawings! Course includes: Comic Strips, Magazine, Sport, Politicals, Animals, Advertising, Book Illustration, CUTE GIRLS, etc. Your homework criticized by FAMOUS TEACHERS. Two years to finish.

APPROVED FOR VETERANS

Dept. FG

The PROFESSIONAL SCHOOL OF CARTOONING, INC.

505 Fifth Avenue, New York 17, N. Y.

If You Get Up Nights

Try This FREE

If your sleep is disturbed by getting up many times at night due to irritation of Bladder or Urinary Tract, try PALMO TABLETS at our risk if you have never used them. All you do is simply test 20 Tablets FREE from the Full-Size Package we send you. If palliative relief doesn't surprise and delight you, return extra tablets and you pay nothing for the trial. SEND NO MONEY. Mail name and address today and we will send your PALMO TABLETS by return mail postpaid. For Adults Only. Address—H. D. POWERS CO., Dept. 11-12, Box 135, Battle Creek, Michigan.

High School Course at Home - Many Finish in 2 Years

Go as rapidly as your time and abilities permit. Course equivalent to resident school work—prepares for college entrance exams. Standard H.S. texts supplied. Diploma. Credit for H. S. subjects already completed. Single subjects if desired. High school education is very important for advancement in business and industry and socially. Don't be handicapped all your life. Be a High School graduate. Start your training now. Free Bulletin on request. No obligation.

American School, Dept. H882 Drexel at 58th, Chicago 37

BOOKLETS The kind grownups like. Each one of these booklets is POCKET SIZE, also contains 8 ILLUSTRATIONS, and is full of fun and entertainment. 12 of these joke booklets, ALL DIFFERENT, shipped prepaid upon receipt of $1.00, or 24 BOOKLETS ALL DIFFERENT shipped prepaid for $2, cash or money order. No orders sent C.O.D. Print name and address and mail to: Treasure Novelty Co., Dept. 36-N, 28 Cooper Station, N. Y. 3, N. Y.

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Amazing New LOW PRICED Electric Sprayer For Home Use Makes Painting Easy!

SAVE MONEY, TIME, WORK! GET PROFESSIONAL SPRAYING RESULTS!

- Paint Floors, Ceilings, Walls, Woodwork, Furniture, Toys
- Enamel Auto Bodies and Fenders, Storm Windows, Screens
- Varnish Table Tops, Linoleum
- Spray Moth-Proofing Liquids in Closets and Attics
- Spray Flit or Other Insect and Pest Solutions
- Spray Insecticides on Flowers, Plants, Shrubs
- USE VIBRO SPRAYER for EVERY Job of Painting and Spraying in and Around the Home
- Self-Contained Unit—No Motor, No Compressor, Produces Equivalent of 40 lbs. Pressure!

HOUSEHOLD ITEMS—It's easy to paint clothes hampers, kitchen chairs, shelving, partitions, slat fences, metal trash drums, etc., with Vibro-Sprayer!

OUTDOOR FURNITURE—Just the thing for painting rustic chairs, reed furniture, brickwork, boats, wagons, and other equipment!

ROUGH SURFACES—Makes quick work of painting concrete, rough wood or window screening!

INSECT CONTROL—Efficiently aids extermination of roaches, waterbugs, flies, mosquitoes and other pests. Fine for mothproofing clothes!

AUTOMOBILE MAINTENANCE—Provides the answer to quick, smooth touch-up work on fenders and body. Sprays light oils for under-chassis lubrication.

GARDEN PEST CONTROL—Ideal for spraying insecticides and fungicides on flowers, plants and shrubs.

TRY IT 10 DAYS FREE IN YOUR OWN HOME!

Yes, now you can do a *professional painting* job on everything in and around your house with this amazing, brand new, self-contained electric paint sprayer. Just fill the big, 25-ounce capacity, interchangeable mason jar with any kind of ordinary oil-base liquid—lacquer, glossy paint, enamel, varnish, shellac, residual type insecticides, light oils, moth sprays, disinfectants, etc. Then plug the 8-ft. insulated cord into any 110-volt A.C. household outlet—pull the trigger—and get satin-smooth, professional results *every time!*

SAVE MONEY, TIME AND WORK

VIBRO-SPRAYER paints twice as fast as a brush, saves strain, fatigue, backache and sore muscles. Paint goes on FASTER, SMOOTHER and far more EASILY than with a brush. Adjustable spray control allows wide or narrow spray, thick or fine, as the job requires. Spray radius is always under complete control. VIBRO-SPRAYER cannot clog or drip—and is amazingly simple to clean. What's more, VIBRO-SPRAYER is SAFE! Will never break in use as there is NO pressure in the jar.

COSTS LESS THAN A GOOD BRUSH

Not only does VIBRO-SPRAYER paint faster, smoother, more easily than a good brush, but it actually costs less! And because VIBRO-SPRAYER applies paint more evenly and uniformly, you use LESS PAINT—save the cost of the sprayer in just a few months! In addition, VIBRO-SPRAYER shoots a fine, even spray into deep crevices where ordinary paint brushes can't reach, makes short work of rough or pebbled surfaces that are so difficult to brush.

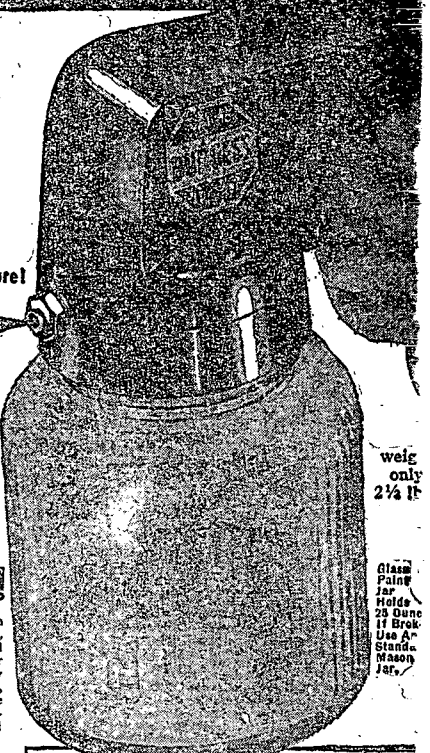
MADE BY A FAMOUS COMPANY

VIBRO-SPRAYER is manufactured by the world-famous Burgess Battery Company, makers of popular auto and flashlight batteries. Every VIBRO-SPRAYER is guaranteed by the manufacturer to be free of mechanical defects. In addition, we guarantee that VIBRO-SPRAYER will give you exactly the professional, fast, labor and money saving results you desire, or you may return your sprayer within 10 days for full purchase price refund. You get FULL PROTECTION under this DOUBLE GUARANTEE!

SEND NO MONEY

Send only the coupon, now. When your VIBRO-SPRAYER arrives, pay the postman only $12.95 plus small delivery charge—or enclose full payment now and we pay all delivery charges. In either case you are fully protected by the manufacturer's guarantee of mechanical perfection, and our guarantee of complete satisfaction, or return your VIBRO-SPRAYER within 10 days for full purchase price refund. Send the coupon AT ONCE!

FOSTER PRODUCTS, INC.
179 Wooster St., New York 12, N.Y.



weighs only 2¼ lbs.

Comes Complete—All Ready to Use—No Extras to Buy!

VIBRO-SPRAYER is completely self-contained—the ONLY unit of its kind on the market. Nothing else to buy, no hose, compressor, motor, tank, etc. Just pour liquid into paint jar, (25 ounce capacity) plug in and press the trigger! Size 8½" high, 6½" deep, 4" wide. Works on activated piston and suction principle. Built like professional equipment—does the work of a $100.00 unit producing 40 lbs. pressure!

ONLY **$12.95**

FREE TRIAL COUPON—MAIL NOW!

FOSTER PRODUCTS, INC., Dept. SG-208
179 Wooster St., New York 12, N. Y.

Please send a VIBRO-SPRAYER for 10 days no-risk examination. On arrival I will pay the postman only $12.95 plus small delivery and handling charge.

☐ Check here if you enclose $12.95 now. We pay all delivery and handling charges.

Name .....

Address .....

City ..... Zone ..... State .....

NOTE: Whether you order C.O.D., or prepaid, you receive the full protection of our GUARANTEE of satisfaction or money back!

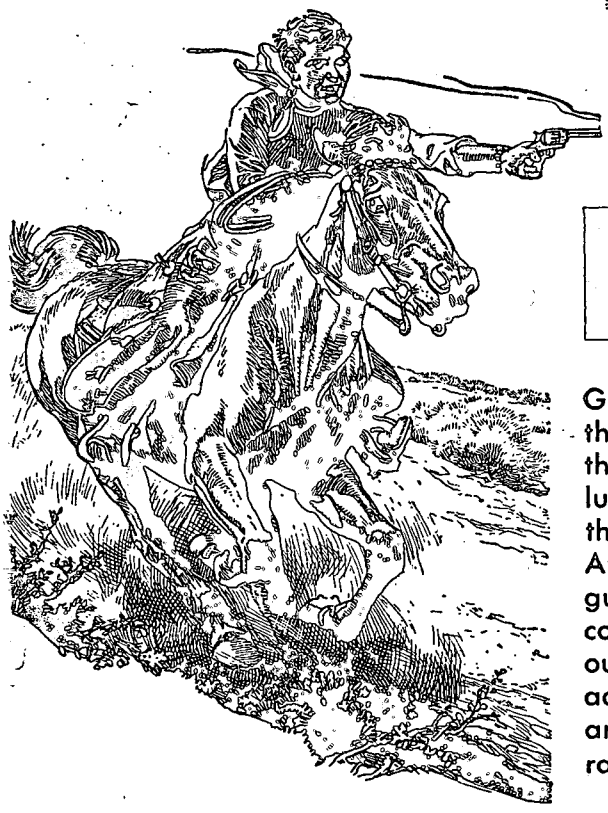
PRINTED IN U.S.A.

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

ACTION!

THRILLS!

SUSPENSE!



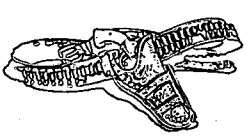
EVERYTHING MOVES
A Mile A Minute!

Glory in the thunder of pounding hoofs, the desperate deeds of brave men as they fight for life, love and home in the lustiest, boldest, most dangerous country the world has ever known, the Great American West! Thrill to the smell of gunsmoke as men-of-steel tame a wild country and make love to the courageous women who accompany them into adventure. Hold your breath as hot lead and hotter passion scorches the open range.

)WHERE IN AMERICA CAN YOU FIND BETTER STORIES THAN THESE!

ery story is carefully selected, every story is top notch. They are the best stories ney can buy, and editorial experience can produce. Prove it to yourself . . . Read:

AMMOTH WESTERN



ONCE YOU'VE READ IT, YOU'LL NEVER STOP!

ON SALE AT YOUR NEWSSTAND NOW!

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

ORDER TODAY!

The WORLD'S FINEST SPORTS BOOK

by

CELEBRATED SPORTS CHAMPIONS

(all profusely illustrated)

109—GOOD INFIELD PLAY by Lou Boudreau . . . thoroughly covers every infield position—where and how to field the play . . .

110—SECRETS OF PITCHING by Ewell Blackwell . . . how to hold and throw every type of ball — speed, control, pitcher's function

111—PITCHING TO WIN by Hal Newhouser. . . . championship know-how to win by strategy, technique, clever angles of play . . .

112—COVERING THE OUTFIELD by Terry Moore . . . tips on fielding, throwing, timing, teamwork — outwitting the hitters . . .

116—LOW SCORE GOLF by Jim Ferrier . . . instructions on stance, swing, how to correct faults — more than 100 action photos . . .

117—FISHING FOR TROUT AND BASS by John Alden Knight . . . instructs novice and experienced alike; cycles, feeding habits — photos, diagrams . . .

118—FRESH WATER TACKLE by Jo Alden Knight . . . what anglers sho know about equipment, fly patte casting rod lures, etc. . . .

119—TECHNIQUE OF BAIT CASTI by "Sib" Liotta Jr. . . . complete gu to casting, selection, care, repair tackle, etc. . . .

120—ACCURACY FLY CASTING Harold Smedley . . . authoritative "c and don'ts" for precision casting techniques, etc. . . .

121—WILLIE MOSCONI ON POCK BILLIARDS . . . an all-time great plains the fundamentals which lead championship play . . .

122—PLAYING THE LINE by Cl Turner . . . Chicago Bears star discu technique, strategy of offensive and fensive play . . .

123—PASSING FOR TOUCHDOW by Sid Luckman . . . passing secret penetrate defensive patterns, tur passes into touchdowns . . .

124—TRICKS IN PASSING by Christman . . . forward pass decep tricking the foe by vital element of prise — attack measures . . .

125—BACKFIELD PLAY by Cha Trippi . . . basic formations, orgar tion, strategy effectiveness from si calling to touchdown . . .

131—TABLE TENNIS by Coleman C . . . explains a wide variety of s strokes, techniques that will make a sharper player . . .

LITTLE SPORTS LIBR
Published by ZIFF-DA
Publishing Co.
Chicago 1, Illinois

TO ORDER BY MAIL—CIRCLE VOLUMES WANTED

109	110	111	112	116	117	118	119
120	121	122	123	124	125	131	

Please enclose check or postal note with order. Books will be shipped with full return privileges within five days if not satisfied.

PAYMENT ENCLOSED $_____ (payment includes postage)

$1.25 EACH IN U.S.A.
$1.35 EACH OUTSIDE U.S.A.

NAME_____

ADDRESS_____

CITY_____ ZONE_____ STATE_____

LITTLE SPORTS LIBRARY

185 N. Wabash Avenue • Chicago 1, Illinois

PRODUCED BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED